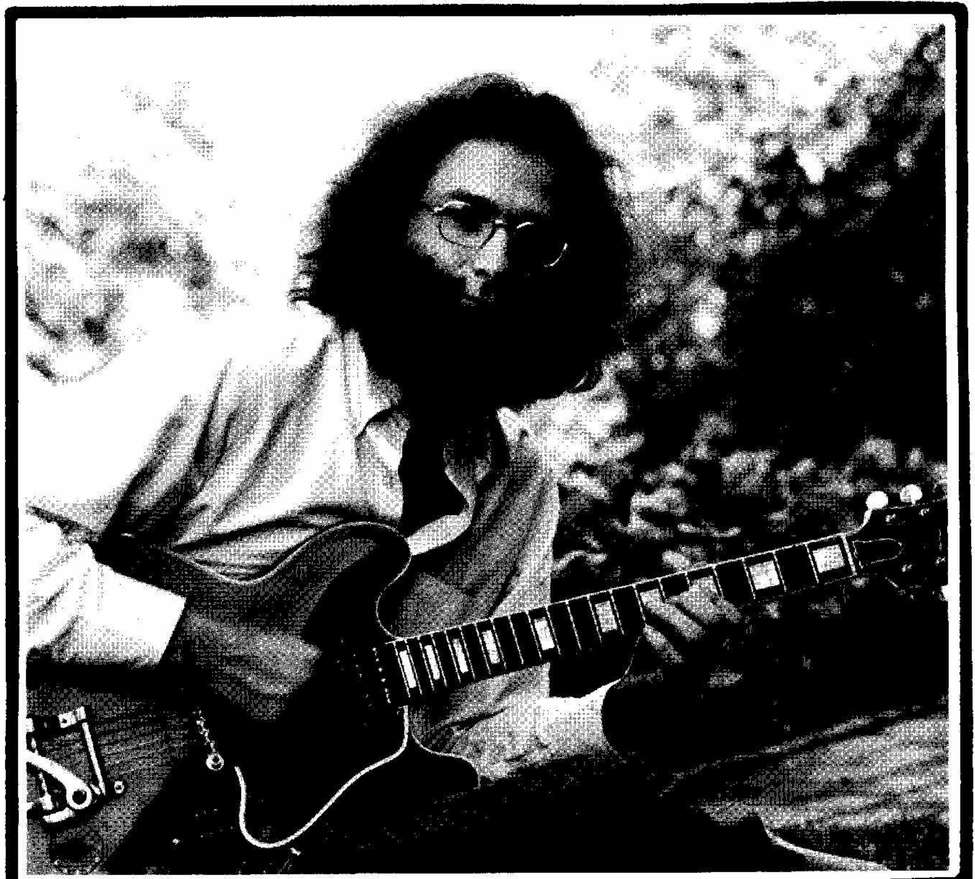
CHORD CHEMISTRY



by: Ted Greene

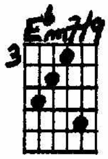
Introduction

PLEASE READ THESE PAGES BEFORE GOING FURTHER

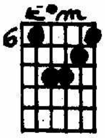
This book deals primarily with chords and *their application.* There are charts of many different kinds of chords given on pages 17-54 , and although learning many nice inversions or different ways to play the same chord is essential to a good guitarist, by itself it is nothing. It is far better to know only a few nice chords and *know how to use them* than to know thousands of chords without knowing where to put them or how they relate to each other. However, neither situation is as desirable as having your cake and eating it too, that is, knowing thousands of chords *and* how to use them.

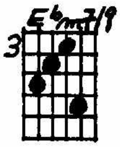
Every chord given in this book has a useage and it is hoped that with patient study, you will learn how to decide on the proper kind of chords for the proper situations, although you will probably continue your learning on this subject for many years to come, as there is always something new to be discovered with chords.

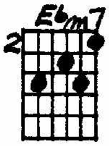
Some chords that are not too pleasing by themselves are excellent when used with the right combination of other chords. Example: E♭m7/9 (If you do not understand how to read this diagram, refer to page 5)

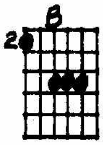


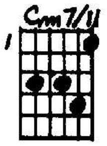
Play this chord To the person who does not know how to use this kind of chord, it may sound very strange if not downright crummy. But notice the way it blends with the following chords:

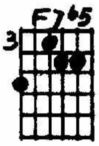


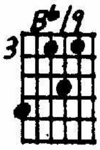












So the point is that if you play a chord and it does not sound good to you, there is an extremely good chance it can be used effectively somewhere, as you will see.

Next point – if you do not know how to read music, it would be to your advantage to learn, as there is much valuable information to be derived from printed music for guitar; also the studying of music written for other instruments such as piano, organ, violin, clarinet, etc., can be a big help.

There is another good reason for learning how to read music: there are some extremely beautiful pieces of music that you could not play unless you know how to read them, because they are not available on record, or if so they are extremely difficult to pick up by ear.

You might be suspecting that all this is leading up to telling you that you have to be able to read music in order to get through this book. This is only partially true. There are only a few sections where the knowledge of reading notes is essential. You will find that most of the sections require nothing more than the desire to learn, and the strength of will to follow through with this desire.

The first half of the book deals mainly with musical theory and there are very few actual playing exercises given. Be patient and try to absorb a few ideas at a time: you need not dwell too long *at first* on all of the thoughts given in the first part of the book unless you wish to. Instead, you might try absorbing a few ideas and going on to a section that involves more playing; then you could keep referring back to the idea pages (such as polytonal chords, synonyms, etc.) and absorbing a few more ideas at a time. However, if any point in this book is confusing to you, there is a good chance that the point is explained in an earlier section of the book, so go back and check it out. Also be prepared to have to read some things more than once in order to fully absorb and understand them; a keyword here is *PATIENCE.*

Another keyword for deriving the maximum benefit from this book is *EXPERIMENTATION.* If an idea is given, ask yourself how many other ways you could play the same idea. For instance, if an example of the chord change C G7 were given and 2 diagrams were listed as suggestions, realize they are just that – *suggestions.* There are hundreds of ways you could play C G7 (that is where the reference charts *on pages 17-54 come in* handy) and likewise, with almost any idea given in this book. Also ask yourself *where* you might use any idea that is given. For instance, you might like the sound of a chord or chord pattern given in the section on moving voices, and you might fit it into a blues. Use your imagination on things like this; however, be careful not to delude yourself into thinking something is great just because it is different. The desire to be different can be a healthy thing as long as it does not become more important than the desire to play music that is enjoyable to listen to.

It is hoped that this book will help you to increase the amount of enjoyable music in the world.

Ted Greene

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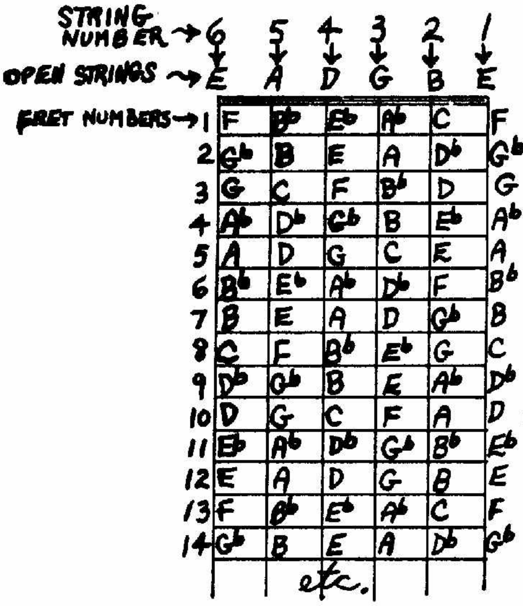
Section 1

Fingerboard Chart and String Relationships



STRING NUMBER →	6	5	4	3	2	1
OPEN STRINGS →	E	A	D	G	B	E
FRET NUMBERS → 1	F	B♭	E♭	A♭	C	F
2	G♭	B	E	A	D♭	G♭
3	G	C	F	B♭	D	G
4	A♭	D♭	G♭	B	E♭	A♭
5	A	D	G	C	E	A
6	B♭	E♭	A♭	D♭	F	B♭
7	B	E	A	D	G♭	B
8	C	F	B♭	E♭	G	C
9	D♭	G♭	B	E	A♭	D♭
10	D	G	C	F	A	D
11	E♭	A♭	D♭	G♭	B♭	E♭
12	E	A	D	G	B	E
13	F	B♭	E♭	A♭	C	F
14	G♭	B	E	A	D♭	G♭

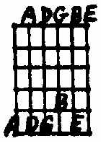
etc.

The term "open string" refers to the sound the string makes when no fingers are placed on the neck (finger board). Assuming the guitar is in tune, the sounds of the strings are as indicated on the chart at the left. In between F and G, G and A, A and B, C and D, and D and E, the notes are written as flats (G^b, A^b, B^b, D^b, E^b); these same notes could also be called $F^{\#}$ $G^{\#}$, $A^{\#}$, $C^{\#}$, $D^{\#}$. Notice also that every letter name is on every string *at least* once.

Eventually, if not already, you will find it advantageous to know the names of the notes on the neck. This seems to be quite a task to most people, but they can be memorized pretty easily if a systematic approach is used:

1) You must memorize the open string names (EADGBE)
2) Notice that the notes on the 1st and 6th strings are always the same letter names on identical frets.
3) Next, notice that the notes on the 5th fret (with the exception of the 3rd string – use the 4th fret for it) are the same as the open string notes on the next *higher* string (higher in *pitch* – the 1st string is the highest and the 6th string is the lowest.)

Example: on the 5th fret of the 6th string is A, the same sound as A open on the 5th string.



These notes on the 5th fret (3rd string – 4th fret) will be called the *1st reference points.*

4) The notes on the 12th fret are the same letter names as the open strings (but an *octave* higher) and the notes starting from the 13th fret are identical to the notes starting from the 1st fret (but an octave higher). In other words, the same letter name notes are 12 frets apart on the same string. The notes on the 12th fret will be called the *2nd reference points.*
5) With just those 2 reference points it is easy to find any note on any string.

Example: Try to find $F^{\#}$ on every string. Starting with the 6th string, the reference points are A and E; ask yourself if $F^{\#}$ is closer to A or E in the alphabet; it is closer to E, so counting up from E, you find $F^{\#}$ on the 14th fret, remembering that the notes above the 12th fret have the same letter names as the notes 12 frets lower, you will find $F^{\#}$ also on the 2nd fret.

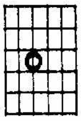
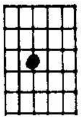
Following this same system of thought for the 5th string, you start with your reference points D and A. Well, $F^{\#}$ is pretty close to both D and A in the alphabet (remember the musical alphabet only goes up to $G^{\#}$ and then you have A again); so you could count back from A or up from D and find $F^{\#}$ on the 9th fret and then an octave higher (add 12 frets) on the twenty first fret (assuming your guitar has that many frets).

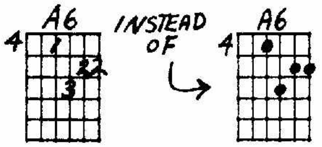
You could now continue and find $F^{\#}$ on all the other strings in the same manner. With 15 minutes a day of practicing this system, arbitrarily picking any note and trying to find it on all strings, you should start to get the picture of the neck in your mind within a short time.

Section 2

Chord Reference Charts Explanation

The type of diagrams or charts given on the following pages are the standard ones used for guitar. The following explanations should clear up any questions about how to read them.

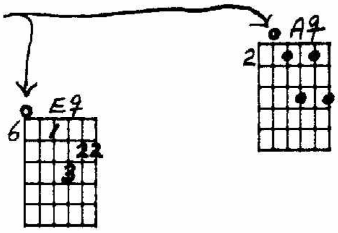
1) All chords are given in keys of A and E for convenience, as most guitar players know these keys as well or better than others. However, they are all moveable to other keys; for instance, to play a C6 you could raise an A6 3 frets or lower an E6 4 frets.
2) Only the strings on which notes are listed are to be played. The other strings are either to be deadened or are to remain silent.
3) Optional notes will be symbolized by  instead of 
4) The fret that the chord is to be played on will be listed to the left of the diagram.
5) In many chords more than one good fingering is possible, so when a certain fingering has proven to be necessary but not too obvious, only then will it be listed. Example: the A6 chord



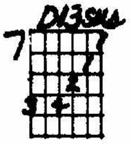
The index finger is considered to be the first finger, the middle finger the 2nd, and so on. If the thumb were to be used, a T would indicate it.

6) Below each major chord are the "tones" of the chord in relation to the major scale of that chord, such as root (R), 3rd (3), 5th (5). If you do not understand this, go right to section 4 of this book.
7) Some chords will be too hard to play down on the lower frets but will be useable on the high frets, also some chords *sound* better on either the higher or the lower frets. EXPERIMENT.
8) Chords with open strings are not listed as there are literally thousands of them and there are already enough chords in this book to keep you busy. One hint though: try playing an open 6th string (E) with any chord whose root is E, that does not use the 6th string already. Likewise, with the fifth string and any chord whose root is A. Examples:

This symbol above the diagram means open string.



Also notice that in some of the charts you will have the 1st finger indicated on 2 different frets like so: In a case like this the note on the 2nd string is played with the *tip* of the 1st finger while the note on the 1st string is played with the *side* of the 2nd or 3rd joint of the same finger. This technique takes a little practice but is not too difficult once you get into it.



Some chord *symbols* may be confusing, but a few words about them should clear things up. 1) A slash through a number means major type. Example: $\not{9}$ = major 9th; $\not{7}$ = major 7th, etc. 2) The symbol that looks like a plus sign (+) always means that the 5th of a chord is sharped (in this book), unless it is written like so (+11) . This means the 11th is sharped; the word *augmented* is sometimes used instead of *sharped.* However, there is a chord that is called the augmented chord, as you will see in the formulas on page 11 . There is one problem with this sign (+) and word (augmented). Some musicians have chosen to refer to the 7th chord with a sharped 9th as the augmented 9th chord, and they write it like this: 7+9. In this case the + sign replaces the # sign. You will not see this type of thing in this book, but you may run across it in other books, music, etc., so be aware of it.

Also the word *suspended* in this book will mean that the 3rd in a chord has been replaced with a 4th. *In other books,* it may be used instead of the word *add.* For instance, C sus. 9 could be C add 9. In any case, it is abbreviated *sus.*

There are certain slang terms used to refer to chords which should be understood.

1) The DOMINANT 7th chord is usually just called the "7th" chord.
2) The DIMINISHED 7th chord is usually just called the "diminished" chord.
3) The MAJOR 6th and MAJOR 6/9 chords are usually just called the "6" and "6/9" chords.
4) The MAJOR add 9th chord is usually just called the "add 9" chord.

The word "TYPE" of chord will refer to a whole category, or a good portion of it.

Example: A C major TYPE means C6, C7, C9, C6/9, etc. A Cm TYPE means Cm6, Cm7, Cm7, Cm7/11, Cm7^{b}5, etc. However, a Cm7 TYPE would refer only to chords that are derived from the m7. Some Cm7 types are Cm7, Cm7/11, Cm9, Cm11, Cm7^{b}5, Cm9^{b}5 and Cm13.

5) The terms chord PROGRESSION or CHANGE refers to any series of chords.

Section 3

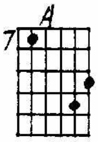
Right Hand Technique

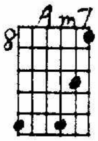
There are at least 5 different right hand techniques being used by guitarists:

1) The flat pick (commonly referred to as just the "pick").
2) The thumb pick and fingers – using the fingers of the right hand with a pick on the thumb only (a la Chet Atkins).
3) The flat pick and fingers – using the middle, ring, and little fingers with the pick.
4) The fingers and thumb with no pick.
5) The thumb only.

You should experiment with all of them and find the ones you like best. You do not have to use only one technique, as many fine players use different ones for different sounds.

However, many of the chords in this book require the use of *either* one of the techniques using the fingers (2, 3, or 4 above), because they would not be playable any other way. Examples:





A word of explanation of technique 3 may be necessary. On 4 note chords, there is no big problem, once you get used to the technique; you just use the pick on the bass (lowest in pitch) note and one finger for each of the remaining 3 strings, the little finger getting the highest note. However, when a chord has 5 or 6 notes, one or two of the fingers must get 2 strings by brushing *across* the strings. On 3 note chords use only 2 fingers and the pick, or 3 fingers.

(Some guitarists also use picks on *each* one of their fingers. You may wish to investigate this technique too).

Section 4

The Major Scale — The Foundation of Musical Theory

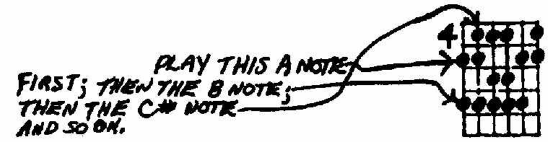
All talk of scales and tones in this book relates back to the major scale. It is hoped that you already have a knowledge of this scale and its construction, but for those of you who don't:

The word scale (another term that is used for the word *scale* is *mode*) refers to a group of notes (tones) and the *intervals* or distances between any 2 adjacent ones. The *major scale* is constructed in what are known as *whole steps* and *½ steps.* These steps, again, refer to the intervals between two notes. Any 2 notes that are 2 frets apart (in other words, separated by 1 fret) are said to be a whole step apart. Examples: E and F#, G and A, A^b and B^b, C and D, etc. Any 2 notes that are adjacent (right next to each other) are ½ step apart. Examples: E and F, G and A^b, A^b and A, C and D^b, etc. The major scale has, starting from any note (which will coincide with the name of the scale), a series of two whole steps, a ½ step, 3 whole steps, and another ½ step. Example: A major scale

1 2 3 4 5 6 7 8
A ✓ B ✓ C# ✓ D ✓ E ✓ F# ✓ G# ✓ A
whole whole half whole whole whole half

The 1st (and 8th) tone of the scale is called the root or tonic. The interval between the 1st & 8th tones is called an *octave.*

Here is one way to play the A major scale, but you should practice finding the notes of this scale in many places on the neck, because without a firm foundation in the major scale, you will have trouble understanding later concepts (this will probably be boring but there is no way around it). After learning the A major scale, practice playing the major scales in all the other keys.



The term TONE refers to the number of a note, if you were to number the notes of a major scale from 1 to 8. For instance, D is the 4th tone of the A major scale. When talking about these tones, it is customary just to say "D is the fourth of A", or "E is the fifth of A" etc. Also the term "a third higher" refers to counting 3 tones higher in the scale, including the tone you start from as the 1st tone. Examples: C# is a 3rd higher than A in the A major scale; G# is a 5th higher than C# in the A major scale, etc.

When referring to chords whose roots are based on a major scale, roman numerals are commonly used. Example: D is called the IV of A; C#m is the III minor (IIIm) of A; E7 is the V7 of A, etc. Also any I type chord may be referred to as the *tonic* chord. These statements will become clear as you progress on.

The major scale can be used to understand the construction of chords as will be shown in section 5.

Section 5

Chord Formulas,
& Families,

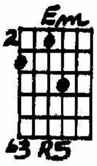
Every chord has a certain combination of tones that distinguishes it from every other chord. These tones may be derived from the major scale with the same root as the chord name. For instance, any minor chord always has the root, ^{b}3rd and 5th tones of the major scale with the same letter name. Therefore, an A minor chord has the notes A, C, and E since they are the root, ^{b}3rd and 5th of the A major scale (remember that the regular 3rd of the A major scale is C# so the ^{b}3rd is C). The particular group of tones that is used for the construction of a particular kind of chord is called the FORMULA of that chord; any chord that has 3 tones in the formula is called a TRIAD.

On page 11 is a list of formulas of the most commonly used chords. They are divided into 3 categories or FAMILIES. The MAJOR, MINOR, and DOMINANT 7TH chords are the "fathers" of the 3 families, and all the other chords, with a few exceptions, are derived from them. When tones are ADDED to any of the 3 basic chords, the resulting chords are called EXTENSIONS. For example: Cm7 is an extension of Cm because the ^{b}7th (B^b) is added to the basic Cm chord to make the Cm7. In other words, 1, ^{b}3, 5, becomes 1, ^{b}3, 5, ^{b}7. Any chord that has a ^{b}5TH, #5TH, ^{b}9TH or #9TH in the formula is called an ALTERED chord; any chord that has the 3RD replaced by a 4TH is called a SUSPENDED chord.

Any chord may be played with different arrangements of the tones in the formulas; these different ways to play the same chord are called INVERSIONS or VOICINGS.

The terms 9th, 11th, and 13th (they are the same letter names as 2nd, 4th and 6th) are a carry over from piano theory. These higher notes were to be played in the right hand or in the higher octaves. On the guitar, they are usually played near the top of a chord, but sometimes the 9th and 11th are even played in the bass.So, it is just due to tradition that they are still called 9, 11, 13, as opposed to 2, 4, 6. For example in a 13th chord, you may refer to the 13th tone as the 6th tone instead – it doesn't really matter. However, when using the #9, it is usually put above the 3rd in a chord, not below (such as in chords like 7 #9, 7#9#5, etc.), and the +11 is usually put above the 5th in a chord (assuming there is a 5th being played) as in chords like the +11, 13+11, etc. Likewise, the 6th (13th) is hardly ever put below a ^{b}7. When you get to Section 7, you will be able to observe these things clearly if you have learned your major scales.

Since there are so many inversions on the guitar, a systematic way of remembering them would seem to be practical. The way suggested in this book is according to the STRINGS being used in the chord. This works best with chords whose formulas contain 3 or 4 tones, and can be explained as follows: starting with a 3 or 4 note chord, RAISE each tone in the chord ON THE SAME STRING up to the next higher tone IN THE CHORD. Example:



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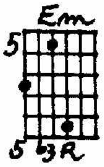
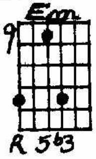
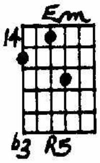
The bass note (G) is the ^{b}3rd of the chord, so STAYING ON THE 6TH STRING, you would move it up to the 5TH (B) of the chord. The ROOT (E) on the 4th string would move up to the ^{b}3rd (G) ON THE SAME STRING, and finally the 5th (B) would move up to the root (E) ON THE SAME STRING. You would then have the following chord:



If you followed the same logic with this chord, you would get the following chord:

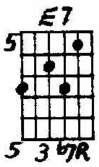


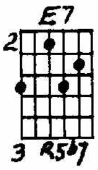
Following the same logic still once more, you would get the 1st form again, but 12 frets or 1 octave higher:

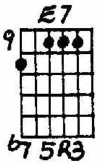


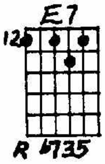
So a rule can be derived from this exercise; that is, that any 3 note chord (triad) has only 3 different FORMS on the same set of strings. Try doing the above exercise with some of the triads listed in the chord reference charts. However, notice that if you start with a chord high on the neck, you will have to work in reverse, that is, LOWERING each tone ON THE SAME STRING to the next tone in the chord. Likewise, if you start with a chord in the middle of the neck, you will have to both lower and raise the notes of the chord, again staying on the same set of strings. But regardless of where you start, you will still get 3 forms from a triad on the same set of strings.

Using the same logic for a 4 note chord, you will find there are 4 forms of any 4 note chord on the same set of strings. Example: A dominant 7th chord is a 4 note chord (there are 4 tones in the formula – 1, 3, 5, ^{b}7). So starting arbitrarily with an E7 you could build the following chords on the same set of strings:





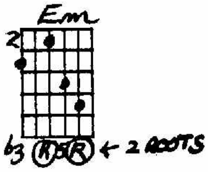




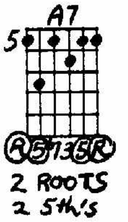
So for each set of strings (like 6,5,4,3; 6,3,2,1; 5,3,2,1 etc.) you could memorize 4 inversions. However, some inversions on certain sets of strings are not practical, so the good inversions have already been worked out for you and listed in the chord reference charts. This holds true for all of the 3 and 4 note chords. The chords with 5 and 6 tones in the formulae are not very well suited to this logic because too many of the inversions are not pleasing to the ears or the hands. But certain 5 note chords such as the 9th can be used when you leave out the root.

This is acceptable because actually in any chord with 5 tones in the formula, the root OR 5th is often omitted and possibly one of the remaining tones DOUBLED, although this is not necessary. By doubled, it is meant repeated, and this is done most often in 3 and 4 note chords. Examples:

MINOR – 3 (IN THE FORMULAS) TONES



DOMINANT – 4 (IN THE FORMULAS) TONES



In chords with 6 tones in the formula, BOTH the root AND 5th may be omitted, and as with other chords, any of the remaining tones may be doubled. However, (in either a 5 or 6 note chord), if the 5th is altered, that is, sharped or flatted, you may not leave it out as it is essential to the chord. You could still leave out the root though. Example: in a 7^{b}9^{b}5 chord you could leave out the root, but not the ^{b}5.

Sometimes, the 5th can even be left out of 4 note chords; you must experiment with this to get ideas where it might be appropriate. Very rarely, the root is left out of 4 note chords.

In chords that have the 11th tone, the 3rd is often omitted, particularly in the 11th chord itself. Also you may try leaving out the 3rd in ANY CHORD (and possibly replace it with a 2nd or 4th)

FORMULAS

These are the formulas for the 3 basic chords and their extensions.

Major

Common Symbol	Name	Formula
( )	Major	1,3,5
(6)	Major 6th	1,3,5,6
(7̶)	major 7th	1,3,5,7
(9̶)	major 9th	1,3,5,7,9
(add 9) (/9)	major add 9th	1,3,5,9
(6/9)	major 6/9th	1,3,5,6,9
(7̶/6)	major 7/6th	1,3,5,6,7
(1̶3̶)	major 13th	1,3,5,7,9,13

Minor

Common Symbol	Name	Formula
(m)	minor	1,^{b}3,5
(m6)	Minor 6th	1,^{b}3,5,6
(m7)	minor 7th	1,^{b}3,5,^{b}7
(m9)	minor 9th	1,^{b}3,5,^{b}7,9
(m11)	minor 11th	1,^{b}3,5,^{b}7, 9,11
(m7/11)	minor 7/11th	1,^{b}3,5,^{b}7,11
(m add 9) (m/9)	minor add 9th	1,^{b}3,5,9
(m 6/9)	minor 6/9th	1,^{b}3,5,6,9
(m7̶)	minor major 7th or minor natural 7th	1,^{b}3,5,7
(m7̶/9)	minor major 9th	1,^{b}3,5,7,9

Dominant 7th

Common Symbol	Name	Formula
(7)	Dominant 7th	1,3,5,^{b}7
(7/6)	Dominant 7/6th	1,3,5,6,^{b}7
(7/11)	Dominant 7/11th	1,3,5,^{b}7,11
(7 Sus)	Dominant 7th suspended	1,4,5,^{b}7
(7/6 Sus)	Dominant 7/6th suspended	1,4,5,6,^{b}7
(9)	Dominant 9th	1,3,5,^{b}7,9
(11)	Dominant 11th	1,3,5,^{b}7,9,11
(13)	Dominant 13th	1,3,5,^{b}7,9,13
(13 Sus)	Dominant 13th suspended	1,4,5,^{b}7,9,13
(7/6/11)	Dominant 7/6/11th	1,3,5,^{b}7,11,13
(11/13)	Dominant 11/13th	1,3,5,^{b}7,9,11,13
(o)	Diminished 7th	1,^{b}3,^{b}5,^{bb}7 or 6
(+)	Augmented	1, 3, #5

Notes

1) The altered chords are not listed here but they mean just what they say. For instance, a C7^{b9b5} would be a C7 chord with the 5th flatted and a ^{b}9th added – in other words the formula would be 1, 3, ^{b}5, ^{b}7, ^{b}9.
2) The diminished and augmented chords do not really fit in any of the families but they are most like the dominant chords in the way that they are used as you will see.
3) Remember that the 9, 11, and 13 tones may be thought of as the 2, 4, & 6 (and vice versa). So the above formulas that have these tones may be written 2 ways. For example, a 7/6 chord could be written as 1,3,5,^{b}7,13.

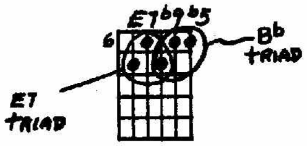
Section 6

Polytonal Chords ("Polychords") (Bi-tonal Chords)

The idea of polychords is given here just to present you with another viewpoint or way of seeing chord construction.

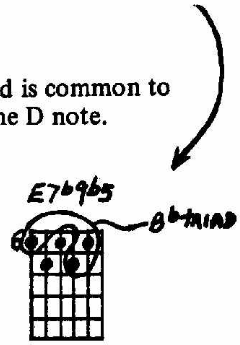
There are quite a few chords that consist of 2 triads or parts of 2 triads. Usually the notes of 1 triad are superimposed on top of another triad although the notes of both triads maybe jumpled up.

Example:



In many cases, 1 of the notes of 1 triad is common to the other. In the $E7^{b9b5}$ chord it is the D note.

So in the $E7^{b9b5}$ you actually have an E7 chord and a B^{b} chord together. Here is the same chord in a different inversion:



Below is a list of some of the polytonal chords; they are given in the key of C but, as usual, they may be played in any key. In many cases the bottom triad may leave out the 5th. Sometimes the bottom triad will be an incomplete 7th chord (usually 1 3 $^{b}7$) or an incomplete triad, such as just the root and 3rd, as in C7 (♮5) (#5)—it would only have the #5 if the 5th of the C triad were not included. You can achieve the desired sound sometimes by leaving out other notes as well—it is up to your ears—the following are just suggestions.

⋆ = no 3rd necessary

1 $C7^{\#9} = \frac{E^{b}}{C}$ TRIADS
2 $C7^{\#9b5(\natural 5)} = \frac{E^{b}m}{C}$
3 $C9 = \frac{G}{C}$
4 $C6/9{+}11 = \frac{D}{C}$
5 $C7^{\#5(\natural 5)} = \frac{E}{C}$
6 $C7^{b9+11} = \frac{F\#}{\star C}$
7 $C7^{\#9+} = \frac{A^{b}}{C7}$
8 $C13^{b9} = \frac{A}{C7}$
9 $C11 = \frac{B^{b}}{\star C(7)}$
10 $C7^{\#9+11} = \frac{B}{C}$
11 $C7^{b9+} = \frac{C\#m}{C7}$
12 $C7^{\#9} = \frac{Cm}{C7}$
13 $C7 = \frac{Em}{C}$
14 $C11/13 = \frac{Dm}{\star C7}$
15 $C9 = \frac{Gm}{C(7)}$
16 $C7/6 = \frac{Am}{C7}$
17 $C11^{b9} = \frac{B^{b}m}{C7}$
18 $C13{+}11 = \frac{D}{\star C7}$
19 $Cm9 = \frac{Gm}{Cm}$
20 $Cm11 = \frac{B^{b}}{Cm}$
21 $Cm7/9 = \frac{G}{Cm}$

This polytonal type of logic is useful if you are playing with another guitar player, bass player, piano player or any other musician involved with creating the harmonic foundation of a piece of music. Examples:

1) For an A11 sound, the bass player can play an A bass note and you could play G triads. (When you are superimposing triads on a bass note, it is usually best to avoid using low sounding voicings; that is, stick to medium to very high notes and let the bass player's note carry the bottom.) As usual, you will have to experiment to see how this type of thinking works.
2) If another guitar player were playing, he could play the A triad (or just root and 5th, since the 3rd is not necessary in an 11th chord) on the low strings, and you could play G triads on the high strings. This again would produce an A11 sound. There are nearly an infinite number of polychord sounds if you look for them.

Section 7

Essential Chords, Synonyms

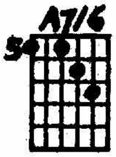
Essential Chords

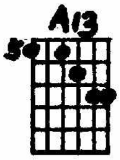
One of the most serious questions in dealing with chords is that of which chords to learn first. Take a moment and first browse through the entire Section 8 — as you can see, the number of chords on the guitar is pretty ridiculous (and there are even more chords than are listed here). So where does one start? You will notice the first grouping of chords is labeled "Essential Chords." These have been found to be more than enough chords to meet the needs of just about any musical situation; so these chords should be studied first and memorized *gradually in terms of complexity* — that is, learn chords whose construction is simple first, and gradually add on the more complex chords. Example: Learn the major and minor chords first, then the major 6th and minor 6th, then the major 7th, minor 7th, and dominant 7th, etc. all the way up to the 13 + 11, 6/9 + 11, and such.

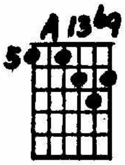
After you have learned these essential chords, (it should take months at least), if you are still hungry for more chords, you could tackle the chord reference charts. Many of the chords listed there are chords with extremely limited application, but the reason for their existence will be explained in Section 13. Anyway, even if you don't get to the chord reference charts for a few years, you will be in good shape if you have learned these essential chords *and know how to use them,* which brings up the next point. As mentioned in the introduction, it would be senseless to know many chords and not know where to use them. The necessary information on how and where to use them is contained in later sections of the book starting with Section 11 (Don't skip Sections 9 and 10 though). A thorough study of at least Sections 11 and 13 would give you a good deal of material to play with. However, you still need vehicles, that is, places where you can *apply* all of this information. That is where learning many different chord progressions comes in,- these are most easily obtained by learning the basic progressions of different songs. Every song will have a chord progression stamped on the sheet music (even if you don't read music, you can read the names of the chords that are listed over the music) and you can use this as your basic framework to which you can apply different ideas. The blues progressions in Section 18 are also good vehicles to which you can apply ideas. Sections 12, 16, and 17 are given to help you understand a little about how certain common chord progressions that you will be seeing quite often, were arrived at.

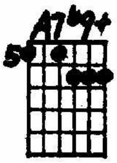
In Section 10, you will encounter ideas which will enable you to move chords from one set of strings to another. You should try this wherever possible on any of the essential chords. Also be absolutely sure you try *all* the possibilities of adding the different optional notes to the chords wherever they are indicated.

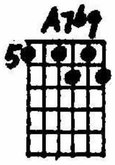
One more thing — try to look for chords that are closely related physically. Example:

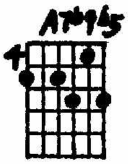


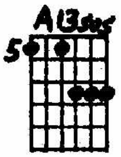


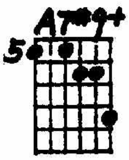


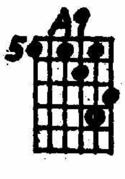


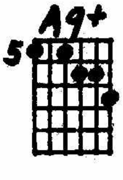


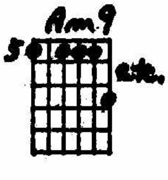




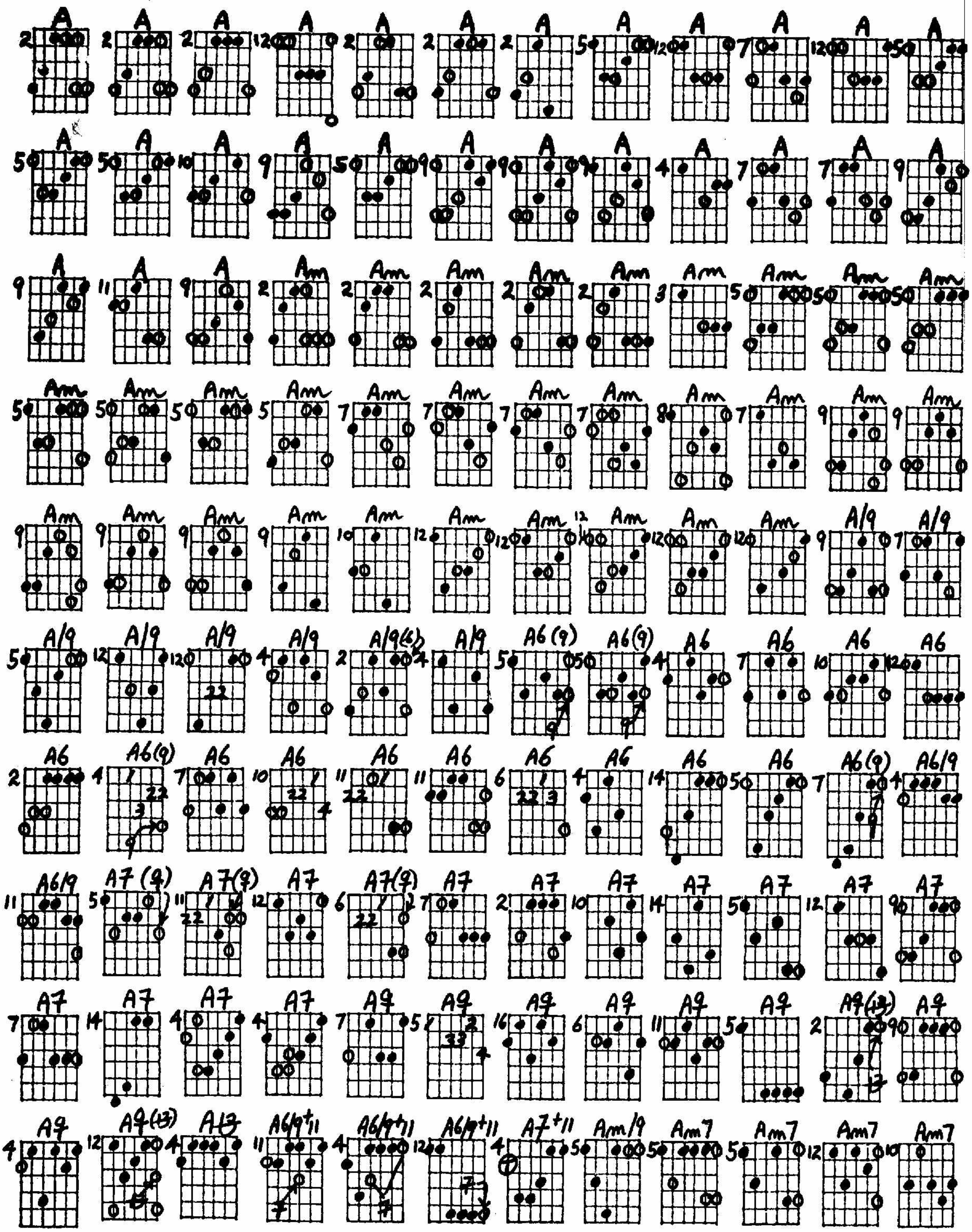








If you can relate to chords in this manner, it will speed up the process of memorizing them.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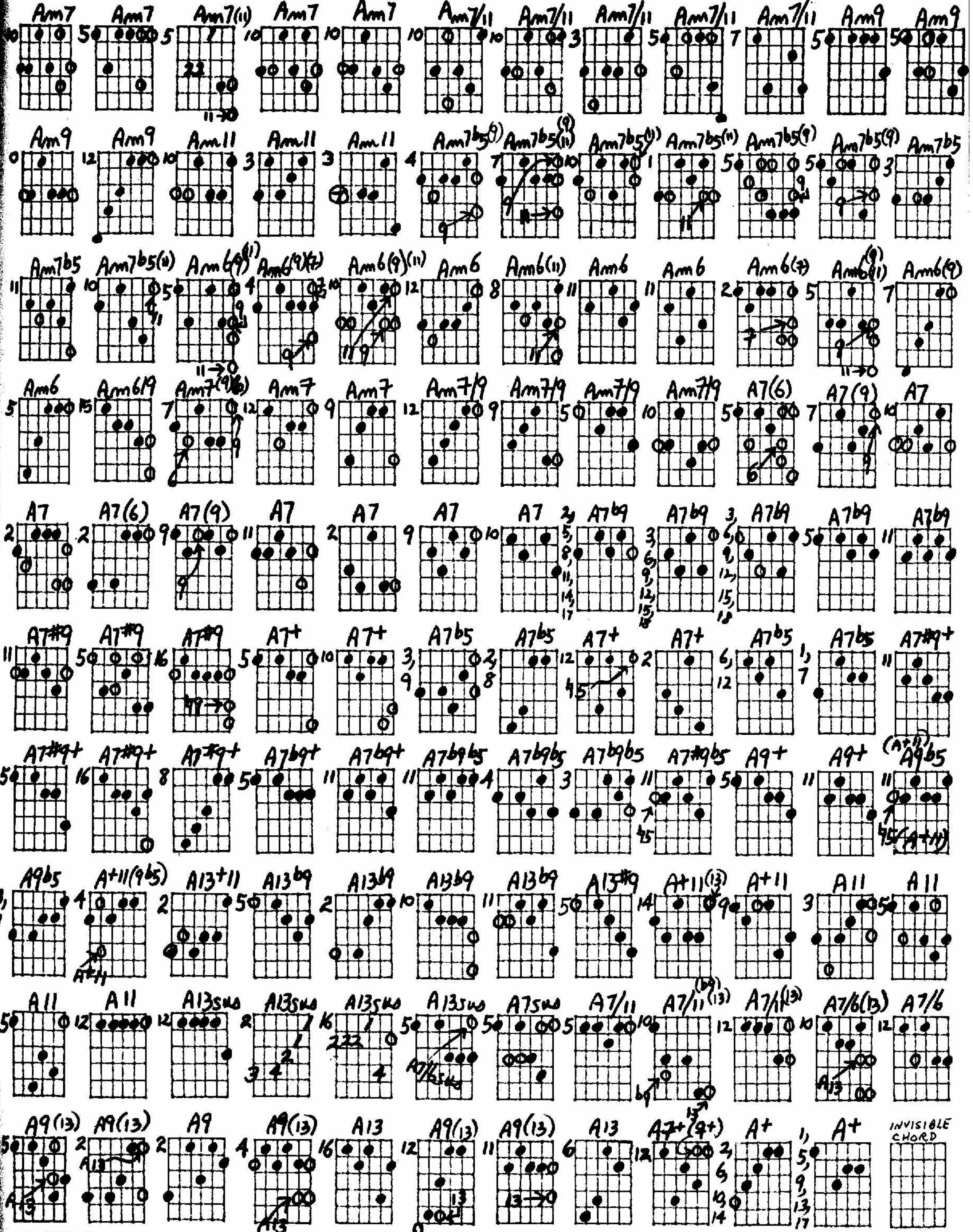
A7+11
Am/9
Am7
Am7
Am7
Am7


Am7 Am7 Am7(11) Am7 Am7 Am7/11 Am7/11 Am7/11 Am7/11 Am7/11 Am9 Am9
Am9 Am9 Am11 Am11 Am11 Am7b5(9) Am7b5(9)(11) Am7b5(11) Am7b5(11) Am7b5(9) Am7b5(9) Am7b5
Am7b5 Am7b5(11) Am6(9)(11) Am6(9)(7) Am6(9)(11) Am6 Am6(11) Am6 Am6 Am6(7) Am6(9)(11) Am6(9)
Am6 Am6/9 Am7(9)(6) Am7 Am7 Am7/9 Am7/9 Am7/9 Am7/9 A7(6) A7(9) A7
A7 A7(6) A7(9) A7 A7 A7 A7 A7b9 A7b9 A7b9 A7b9 A7b9
A7#9 A7#9 A7#9 A7+ A7+ A7b5 A7b5 A7+ A7+ A7b5 A7b5 A7#9+
A7#9+ A7#9+ A7#9+ A7b9+ A7b9+ A7b9b5 A7b9b5 A7b9b5 A7#9b5 A9+ A9+ (A+11) A9b5
A9b5 A+11(9b5) A13+11 A13b9 A13b9 A13b9 A13b9 A13#9 A+11(13) A+11 A11 A11
A11 A11 A13sus A13sus A13sus A13sus A7sus A7/11 A7/11(b9)(13) A7/11(13) A7/6(13) A7/6
A9(13) A9(13) A9 A9(13) A13 A9(13) A9(13) A13 A7+(9+) A+ A+ INVISIBLE CHORD

Synonyms

There are some chords with different names but the same notes, *and they may be used in place of each other.* The most important ones will be listed here,- they are given in only one key, but you should learn them in all keys. For instance, Cm6 = Am7^{b}5; therefore Dm6 = Bm7^{b}5, E^{b}m6 = Cm7^{b}5, etc. Do not try and take in too much at once. It is not important for you to learn all the synonyms at first, because you probably wouldn't know where to put the chords, no matter what you called them, if you do not understand substitutions and voice leading (Sections 11, 13). Study these first and gradually keep coming back to the synonyms and you will find that you are able to apply some of them very easily.

The main benefit of knowing chord synonyms is that you can use them to come up with substitute chords you wouldn't have come up with otherwise. Example: If you saw Am7^{b}5 on a piece of sheet music, and you knew that it was the same as F9 with no root, you might try replacing the Am7^{b}5 with F9 *with* a root, or F7/6 or F13 or any other F chord that is in the Dominant 7th family. If you don't understand this, about substituting extensions within a family, see Section 11 (Page 58) near the beginning of the page.

1. Cm6 = Am7^{b}5 = F9 (no root) = B7^{b}9 + (no root)
   Cm6/9 = Am7^{b}5/11 = F13 (no root) = B7$^{\#}$9 + (no root)(?)
   Cm7̶(6) = Am9^{b}5 = F +11 (no root) = B7^{b}9 +
   Notice also the similarity of Cm7̶/9, Am11^{b}5, and F13 +11

2. Cm7 = E^{b}6
   Cm9 (no root) = E^{b}7̶
   Cm11 (no root) = E^{b}9̶
   etc. Actually all Cm7 type chords are similar to all E^{b} major type chords. Also notice that E^{b}9̶ contains a Gm7 chord. So in one line of thinking, VIm7 and IIIm7 are strongly related to I (E^{b}).
   Also notice the similarity of Cm7 and C7$^{\#}$9. (Cm7) (Gm7)

3. C7^{b}9 (no root)
   E^{b}7^{b}9 (no root) = D$^{b\circ}$, E$^{\circ}$, G$^{\circ}$, B$^{b\circ}$
   G^{b}7^{b}9 (no root)
   A7^{b}9 (no root)

4. C7^{b}5 = G^{b}7^{b}5 = D9 + (no root) = A^{b}9 + (no root)
   C9^{b}5 (no root) = G^{b}7 +
   C9^{b}5 = D9 + = G^{b}7$^{\#}$5^{b}5

5. Notice similarities of C11, C7sus, Gm7/11, B^{b}/9, (B^{b}6/9), and Dm7+, - also between C13sus, C7/6sus, Gm11, and B^{b}7̶ (B^{b}9̶).

6. Notice the similarity between C13^{b}9 and G^{b}7$^{\#}$9.

7. Notice the similarity between C7^{b}9^{b}5 and G^{b}7; also between C7$^{\#}$9^{b}5 and Cm7^{b}5.

8. Notice that a D(molished) = E(gads)

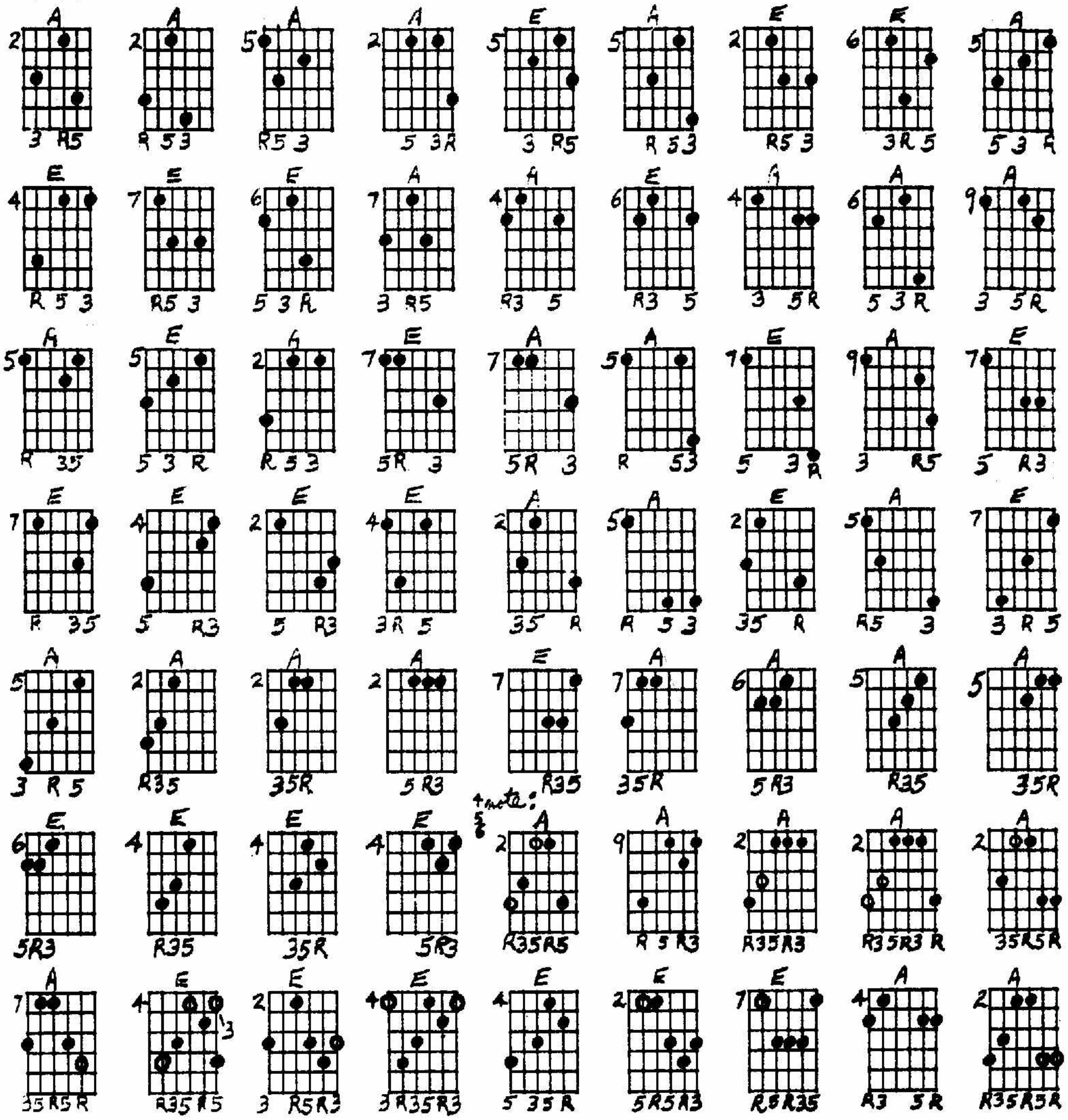
Section 8

Chord Reference Charts

MAJOR CHORDS

For most portions of this section, the chord, formula, & symbol(s) will be listed

3 note chords: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A 2 R 5 3
A 5 R5 3
A 2 5 3R
E 5 3 R5
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E 6 3R 5
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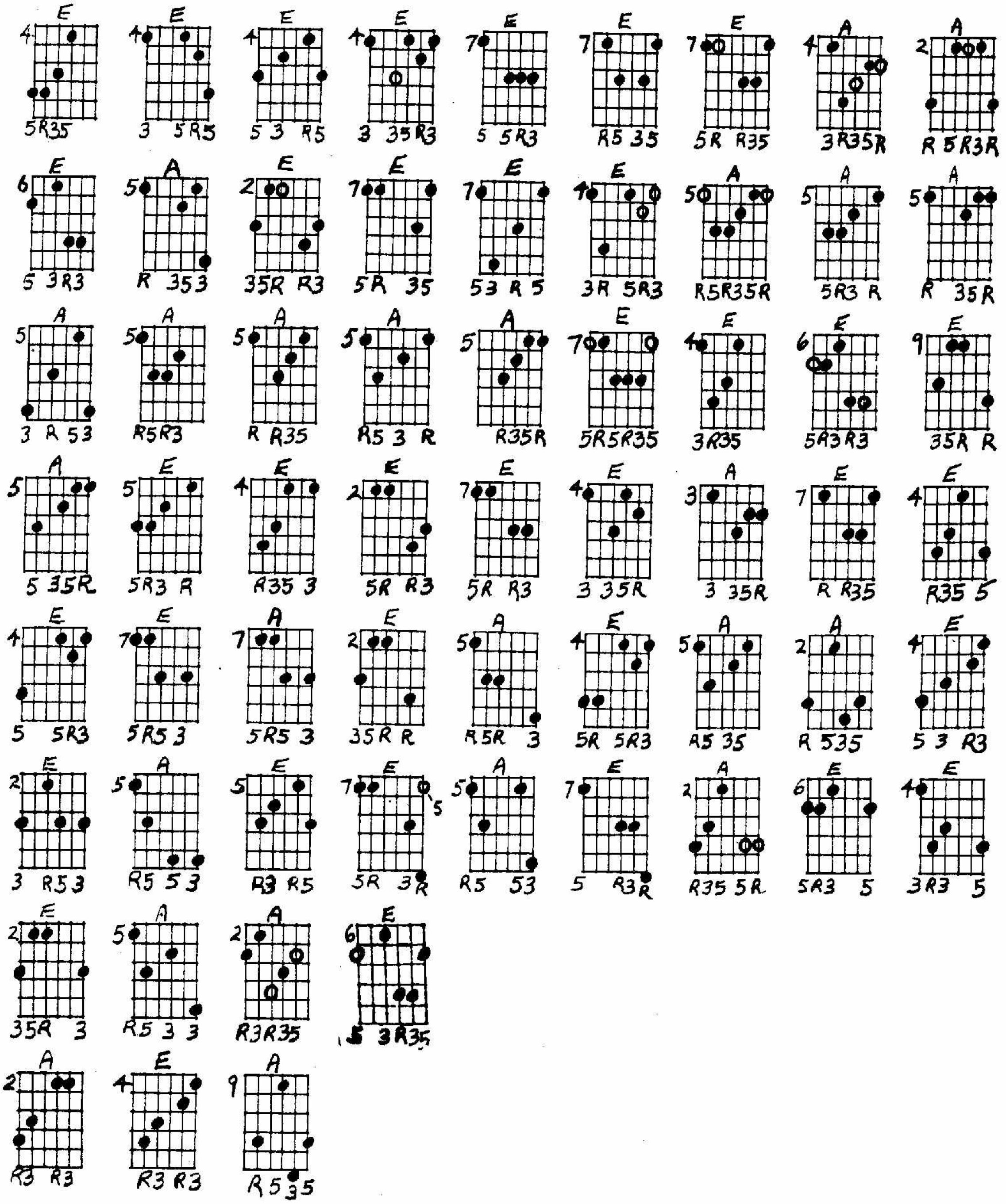
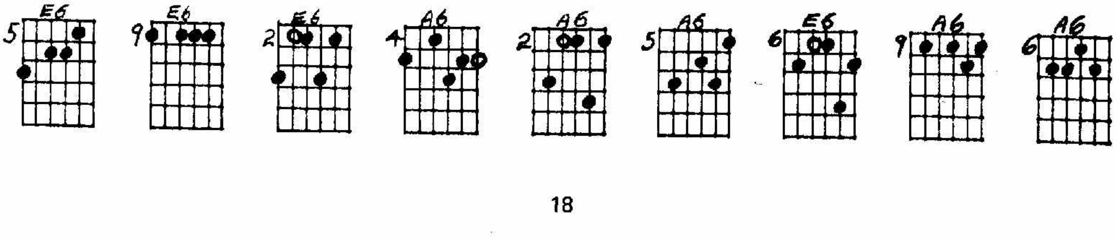
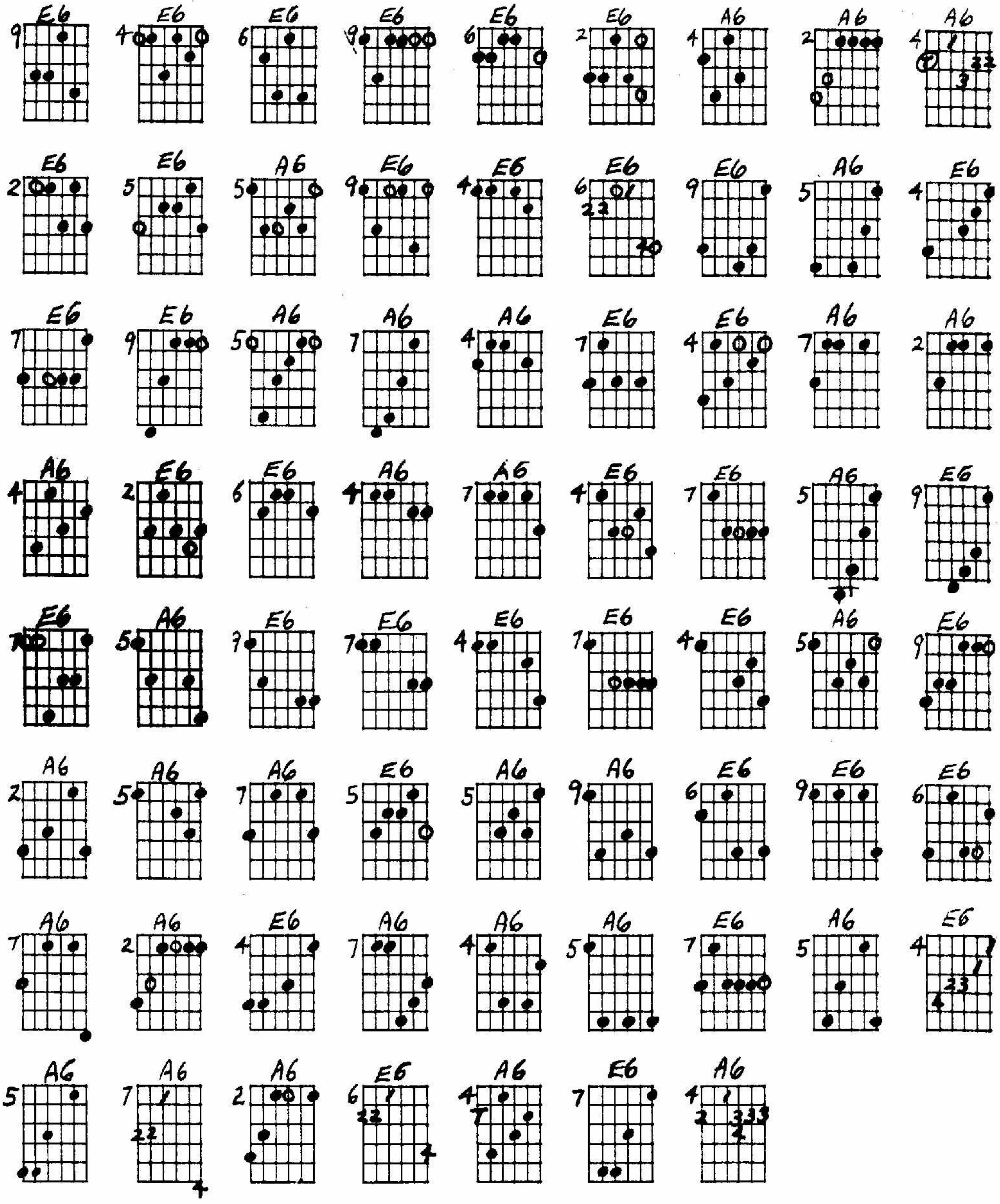
E 4 R 5 3
E 7 R5 3
E 6 5 3 R
A 7 3 R5
A 4 R3 5
E 6 R3 5
A 4 3 5R
A 6 5 3 R
A 9 3 5R
A 5 R 35
E 5 5 3 R
A 2 R 5 3
E 7 5R 3
A 7 5R 3
A 5 R 53
E 7 5 3 R
A 9 3 R5
E 7 5 R3
E 7 R 35
E 4 5 R3
E 2 5 R3
E 4 3 R 5
A 2 35 R
A 5 R 5 3
E 2 35 R
A 5 R5 3
E 7 3 R 5
A 5 3 R 5
A 2 R35
A 2 35R
A 2 5 R3
E 7 R35
A 7 35R
A 6 5 R3
A 5 R35
A 5 35R
E 6 5R3
E 4 R35
E 4 35R
E 4 5R3
4 note:
A 2 R35R5
A 9 R 5 R3
A 2 R35R3
A 2 R35R3 R
A 2 35R5R
A 7 35R5 R
E 4 3 R35 R5
E 2 3 R5R3
E 4 3R35R3
E 4 5 35 R
E 2 5R5R3
E 7 R5R35
A 4 R3 5R
A 2 R35R5R


E 4 5R35
E 4 3 5R5
E 4 5 3 R5
E 4 3 35R3
E 7 5 5R3
E 7 R5 35
E 7 5R R35
A 4 3R35R
A 2 R5R3R
E 6 5 3R3
A 5 R 353
E 2 35R R3
E 7 5R 35
E 7 53 R 5
E 4 3R 5R3
A 5 R5R35R
A 5 5R3 R
A 5 R 35R
A 5 3 R 53
A 5 R5R3
A 5 R R35
A 5 R5 3 R
A 5 R35R
E 7 5R5R35
E 4 3R35
E 6 5R3R3
E 9 35R R
A 5 5 35R
E 5 5R3 R
E 4 R35 3
E 2 5R R3
E 7 5R R3
E 4 3 35R
A 3 3 35R
E 7 R R35
E 4 R35 5
E 4 5 5R3
E 7 5R5 3
A 7 5R5 3
E 2 35R R
A 5 R5R 3
E 4 5R 5R3
A 5 R5 35
A 2 R 535
E 4 5 3 R3
E 2 3 R53
A 5 R5 53
E 5 R3 R5
E 7 5 5R 3R
A 5 R5 53
E 7 5 R3R
A 2 R35 5R
E 6 5R3 5
E 4 3R3 5
E 2 35R 3
A 5 R5 3 3
A 2 R3R35
E 6 5 3R35
A 2 R3 R3
E 4 R3 R3
A 9 R5 3 5

Major Six Chords (6) (M6) (1,3,5,6)


E6 5
E6 9
E6 2
A6 4
A6 2
A6 5
E6 6
A6 9
A6 6

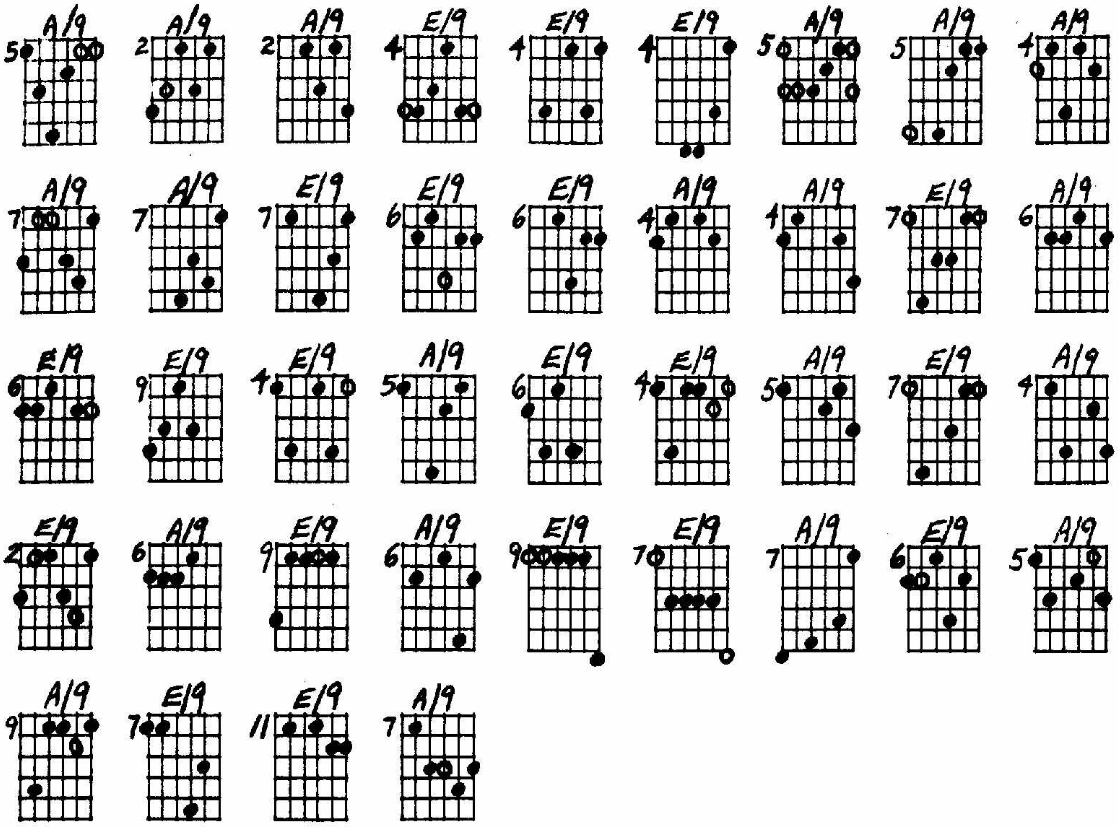

9 E6
4 E6
6 E6
9 E6
6 E6
2 E6
4 A6
2 A6
4 A6
2 E6
5 E6
5 A6
9 E6
4 E6
6 E6
9 E6
5 A6
4 E6
7 E6
9 E6
5 A6
7 A6
4 A6
7 E6
4 E6
7 A6
2 A6
4 A6
2 E6
6 E6
4 A6
7 A6
4 E6
7 E6
5 A6
9 E6
7 E6
5 A6
7 E6
7 E6
4 E6
7 E6
4 E6
5 A6
9 E6
2 A6
5 A6
7 A6
5 E6
5 A6
9 A6
6 E6
9 E6
6 E6
7 A6
2 A6
4 E6
7 A6
4 A6
5 A6
7 E6
5 A6
4 E6
5 A6
7 A6
2 A6
6 E6
4 A6
7 E6
4 A6

Any 6th sus. chord = add 9 chord a 4th higher. Example: A6sus. = D add 9.

Sixth chords with the 6th in the bass must be used more sparingly than the other 6th chords, as they tend to sound like a minor 7th chord whose root is a minor 3rd (3 frets) lower. They are the same chord actually (see synonyms), but the 6th in the bass inversions just seem to imply the m7 chord more, so be careful where you use them.

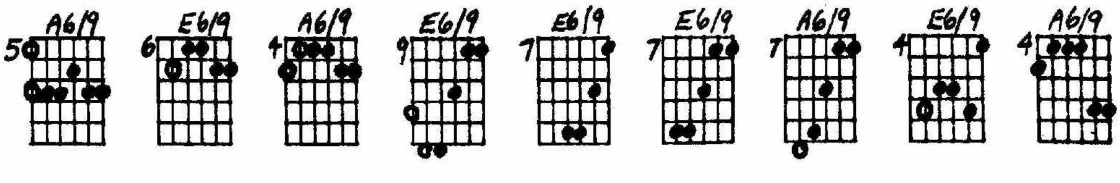
(/9)

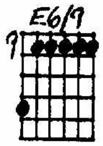
Major Add 9th Chords (add 9) (1,3,5,9)

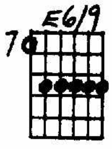

A/9 5
A/9 2
A/9 2
E/9 4
E/9 4
E/9 4
A/9 5
A/9 5
A/9 4
A/9 7
A/9 7
E/9 7
E/9 6
E/9 6
A/9 4
A/9 4
E/9 7
A/9 6
E/9 6
E/9 9
E/9 4
A/9 5
E/9 6
E/9 4
A/9 5
E/9 7
A/9 4
E/9 2
A/9 6
E/9 9
A/9 6
E/9 9
E/9 7
A/9 7
E/9 6
A/9 5
A/9 9
E/9 7
E/9 11
A/9 7

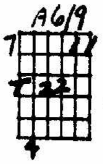
Any add 9/sus. chord = 7sus. chord a 5th higher. Example: E add 9/sus. = B7 sus.

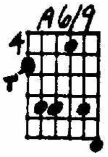
Major sixth/9th Chords (6/9) (1,3,5,6,9)

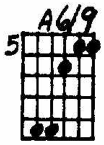

A6/9 5
E6/9 6
A6/9 4
E6/9 9
E6/9 7
E6/9 7
A6/9 7
E6/9 4
A6/9 4

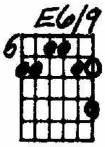


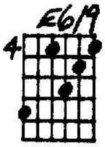


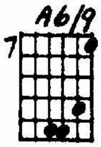


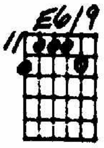


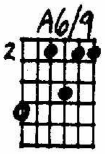


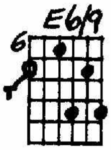


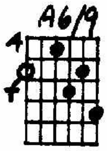


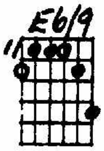


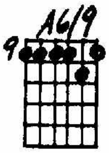


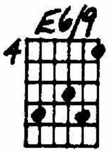


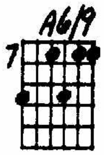


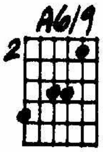


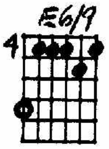


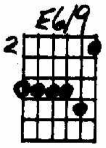


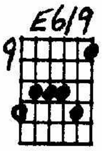


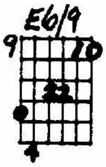


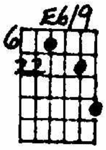






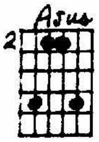


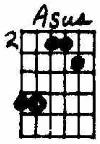


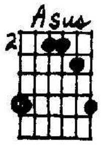


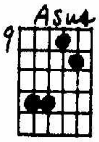
Any 6/9 chord without a 3rd = 7sus. chord a whole step higher. Example: E6/9 (no 3rd) = F#7sus. Also any 6/9sus. chord = another 6/9 a 4th higher. Example: A6/9sus. = D6/9. Also any 6/9 chord without a root = 7sus. chord 3 frets lower. Example: E6/9 (no root) = D^{b}7sus.

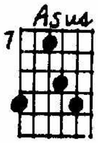
Suspended Chords (sus.)

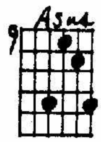


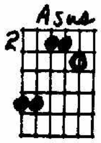


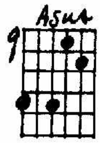


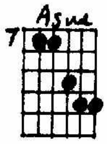


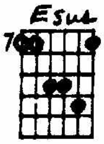


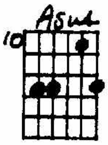


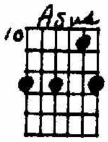


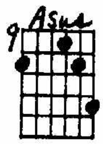


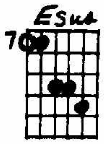


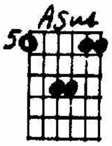


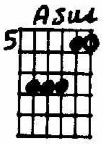


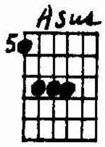


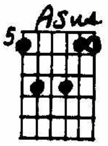


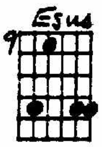


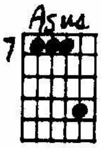


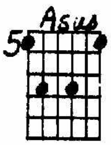


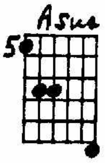


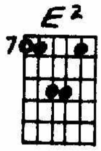


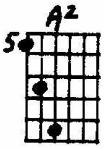


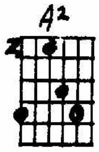


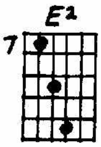


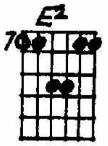


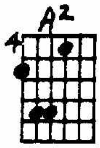


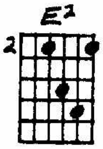


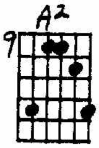


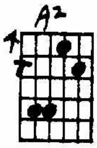


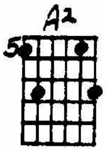






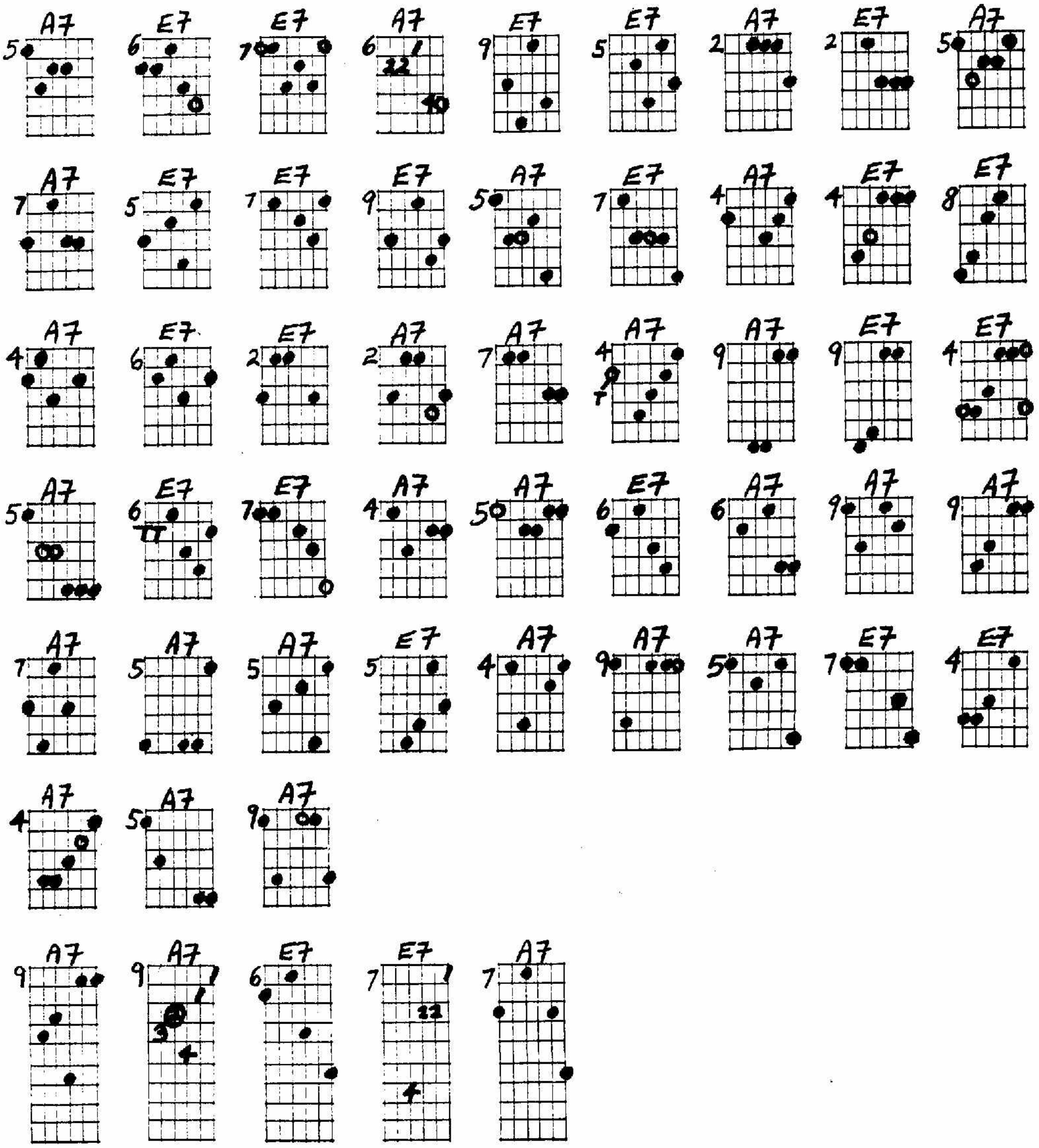




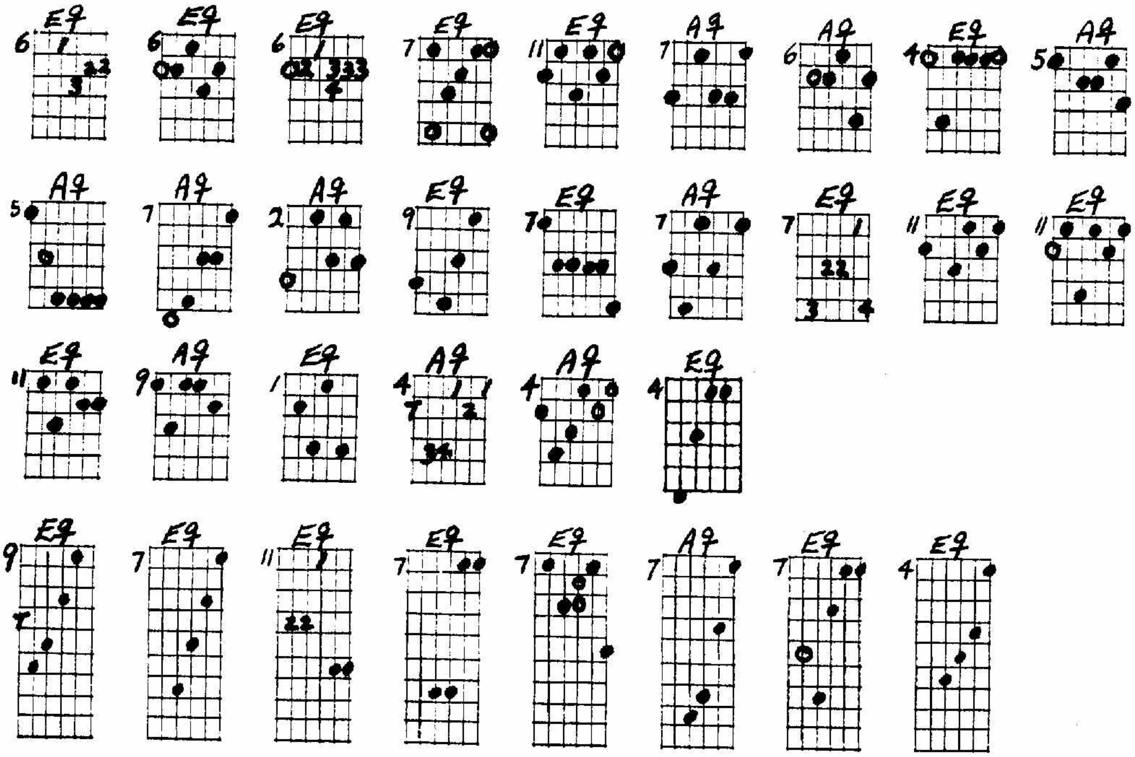


Notice that an Asus. is the same as a D chord with the 3rd lowered to the 2nd. For lack of a better name this will be called a D^2 chord. Also A7sus. and A9sus.= E7/11; A13sus. and A7/6sus.= E11.

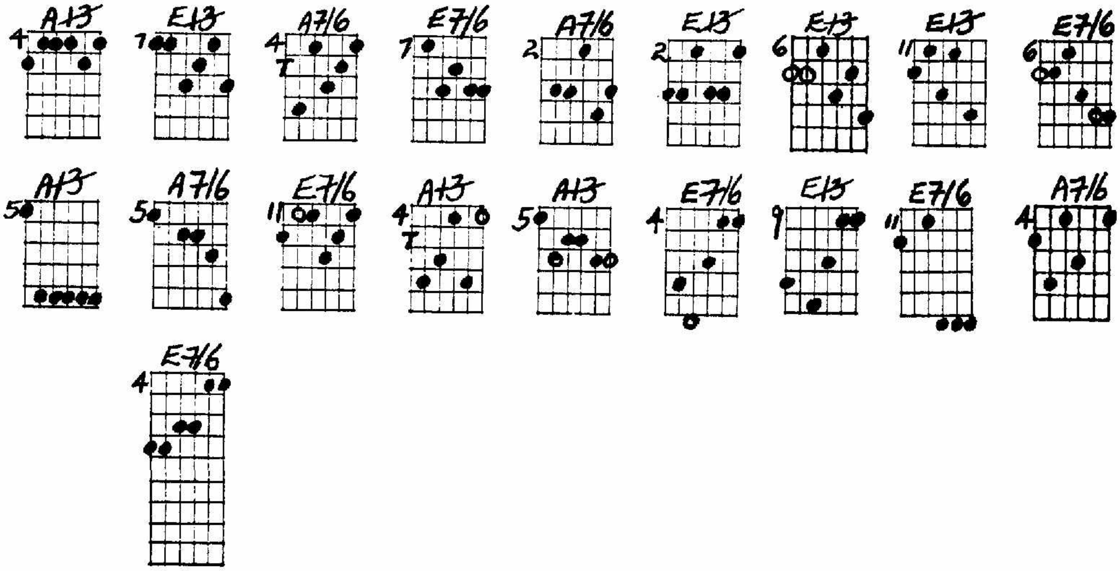
Major 7th Chords (7) (maj 7) (M7) (1,3,5,7)


A7 5
E7 6
E7 7
A7 6
E7 9
E7 5
A7 2
E7 2
A7 5
A7 7
E7 5
E7 7
E7 9
A7 5
E7 7
A7 4
E7 4
E7 8
A7 4
E7 6
E7 2
A7 2
A7 7
A7 4
A7 9
E7 9
E7 4
A7 5
E7 6
E7 7
A7 4
A7 5
E7 6
A7 6
A7 9
A7 9
A7 7
A7 5
A7 5
E7 5
A7 4
A7 9
A7 5
E7 7
E7 4
A7 4
A7 5
A7 9
A7 9
A7 9
E7 6
E7 7
A7 7

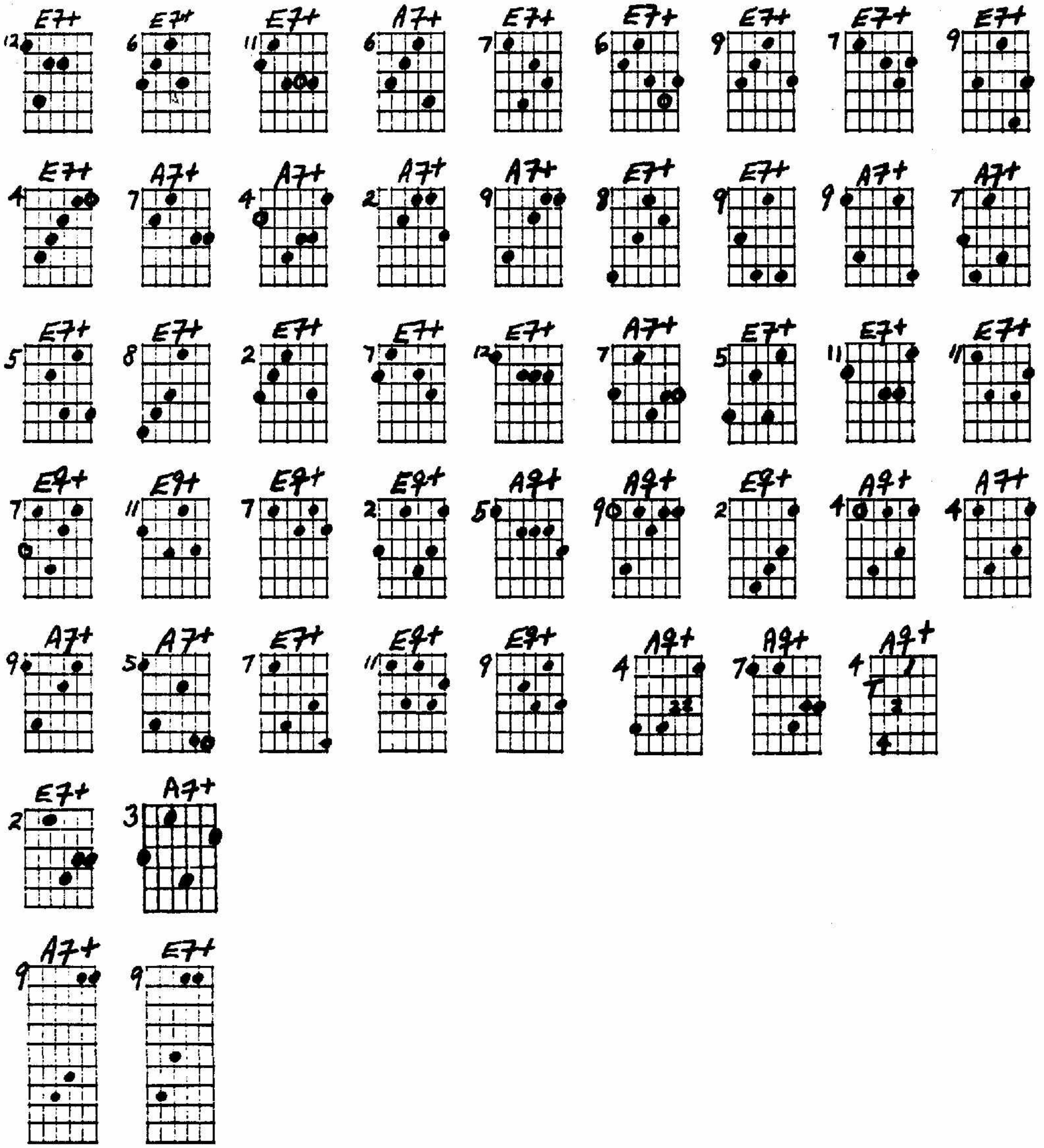
Major 9th Chords (9) and (maj 9) (M9) (1,3,5,7,9)


6 E9
6 E9
6 E9
7 E9
11 E9
7 A9
6 A9
10 E9
5 A9
5 A9
7 A9
2 A9
9 E9
7 E9
7 A9
7 E9
11 E9
11 E9
11 E9
9 A9
1 E9
4 A9
4 A9
4 E9
9 E9
7 E9
11 E9
7 E9
7 E9
7 A9
7 E9
4 E9

Major 13th Chords (13) (1,3,5,7,9,13) and Major 6/7th Chords (7/6) (1,3,5,6,7)


4 A13
7 E13
4 A7/6
7 E7/6
2 A7/6
2 E13
6 E13
11 E13
6 E7/6
5 A13
5 A7/6
11 E7/6
4 A13
5 A13
4 E7/6
9 E13
11 E7/6
4 A7/6
4 E7/6

Major 7th Augmented (1,3 #5, 7) and Major 9th Augmented Chords (1,3, #5,7,9) (7+) (9+)


12 E7+
6 E7+
11 E7+
6 A7+
7 E7+
6 E7+
9 E7+
7 E7+
9 E7+
4 E7+
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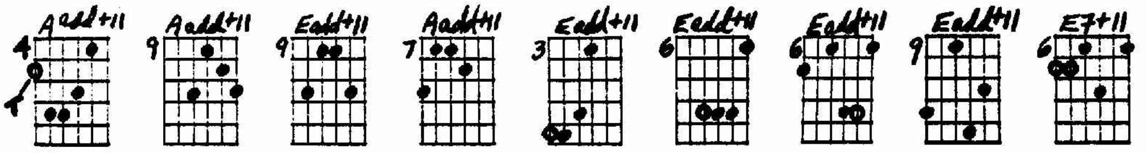
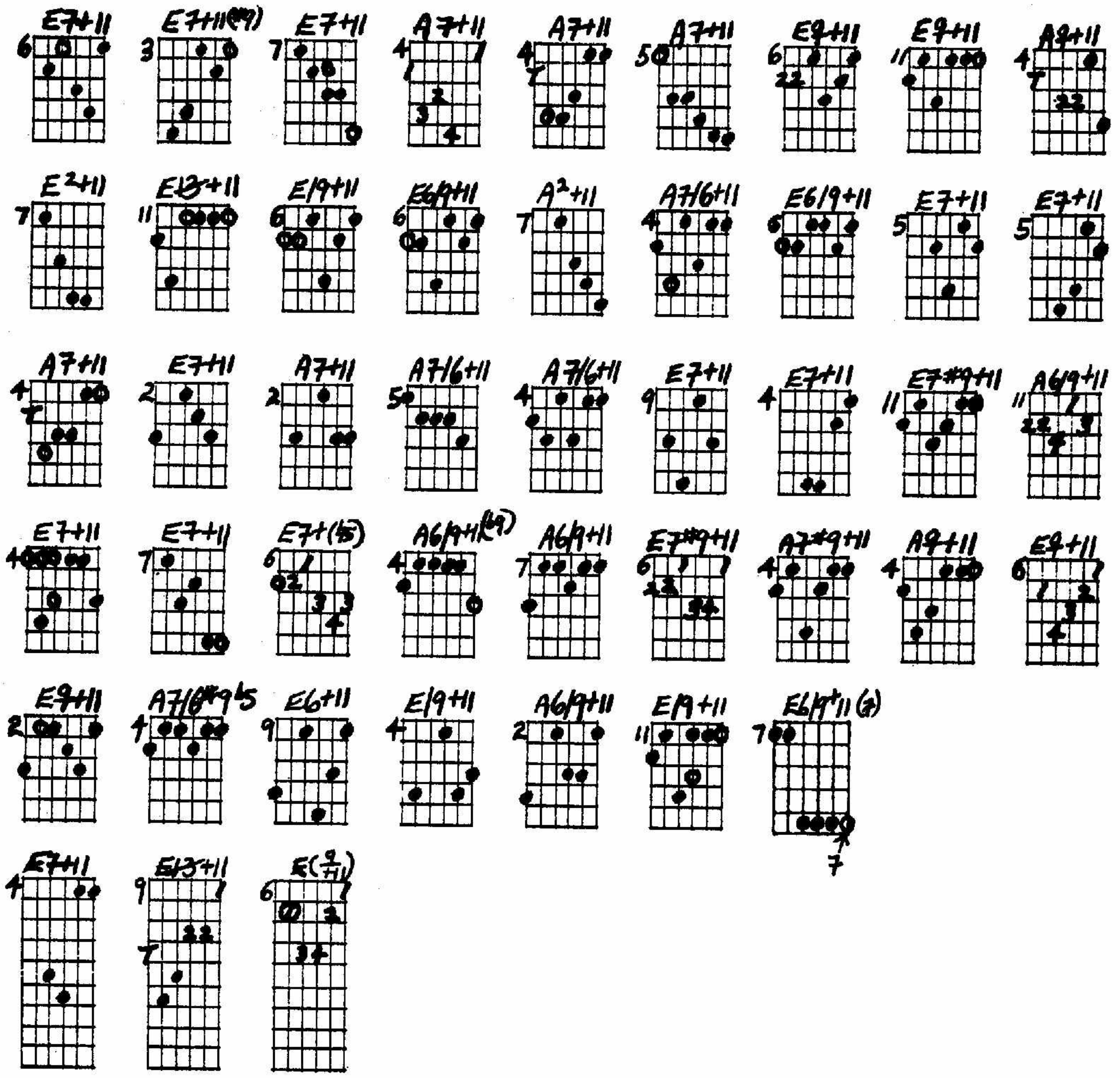
4 A7+
2 A7+
9 A7+
8 E7+
9 E7+
9 A7+
7 A7+
5 E7+
8 E7+
2 E7+
7 E7+
12 E7+
7 A7+
5 E7+
11 E7+
11 E7+
7 E9+
11 E9+
7 E9+
2 E9+
5 A9+
10 A9+
2 E9+
4 A9+
4 A7+
9 A7+
5 A7+
7 E7+
11 E9+
9 E9+
4 A9+
7 A9+
4 A9+
1
T
2
4
2 E7+
3 A7+
9 A7+
9 E7+

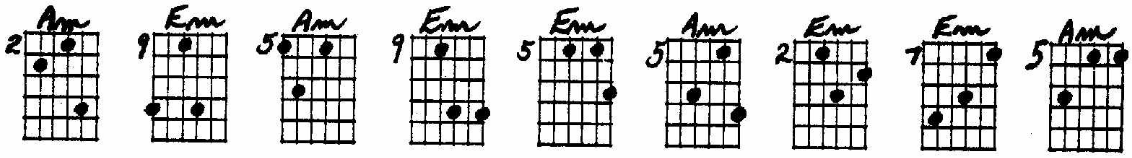
Major add +11, Major 7+11, and Other Weird Names


4 Aadd+11
9 Aadd+11
9 Eadd+11
7 Aadd+11
3 Eadd+11
6 Eadd+11
6 Eadd+11
9 Eadd+11
6 E7+11


E7+11
E7+11(b9)
E7+11
A7+11
A7+11
A7+11
E9+11
E9+11
A9+11
E2+11
E13+11
E/9+11
E6/9+11
A2+11
A7/6+11
E6/9+11
E7+11
E7+11
A7+11
E7+11
A7+11
A7/6+11
A7/6+11
E7+11
E7+11
E7#9+11
A6/9+11
E7+11
E7+11
E7+(b5)
A6/9+11(b9)
A6/9+11
E7#9+11
A7#9+11
A9+11
E9+11
E9+11
A7/6#9b5
E6+11
E/9+11
A6/9+11
E/9+11
E6/9+11(7)
E7+11
E13+11
E(9/+11)

No add 9+ chords are listed; they are the same as 7+ chords whose roots are 2 whole steps higher. Example: E / 9+ = A^{b}7+. Sixth chords with a ^{b}5 are the same as m6 chords whose roots are 3 frets lower. Example E6(^{b}5) = C$^{\#}$m6. Also notice that E6+ = C$^{\#}$m7; E7+ = C$^{\#}$m7/9; E9+ = C$^{\#}$m7/9/11.

Minor Chords (m) (1,^{b}3,5)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Am
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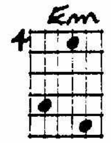
Am
Em
Em
Am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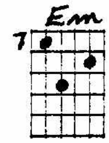
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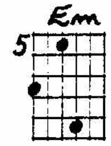
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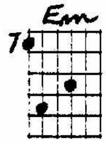
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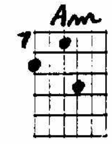
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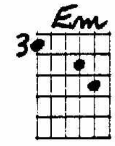
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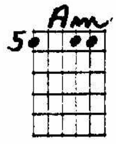
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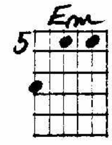
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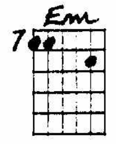
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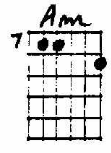
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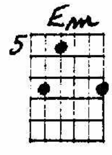
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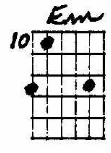
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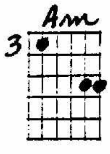
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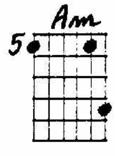
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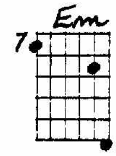
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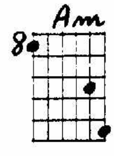
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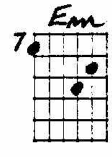
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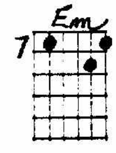
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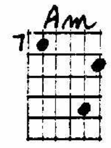
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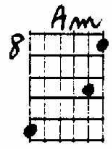
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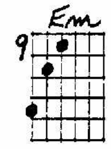
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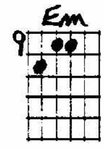
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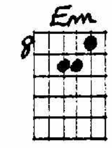
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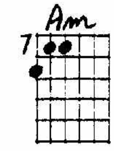
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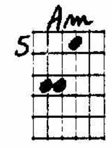
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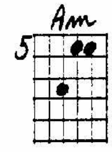
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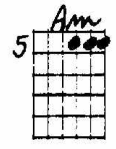
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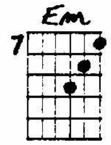
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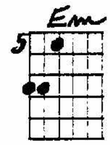
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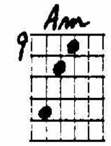
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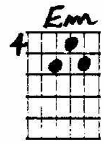
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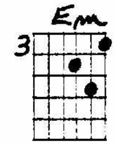
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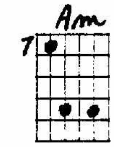
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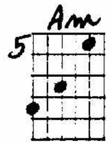
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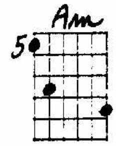
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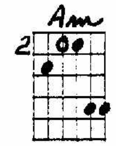
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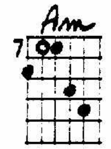
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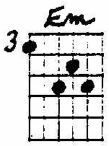
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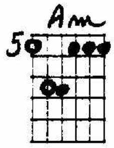
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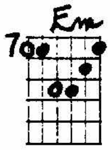
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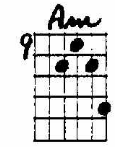
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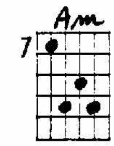
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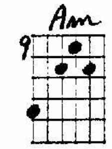
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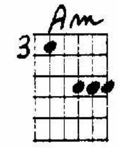
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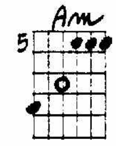
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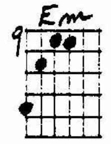
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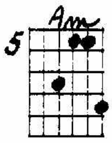
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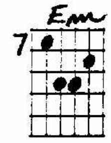
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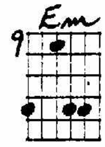
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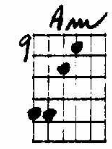
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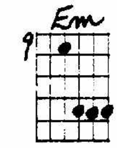
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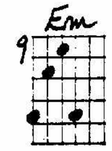
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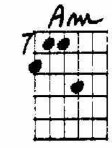
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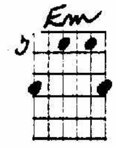
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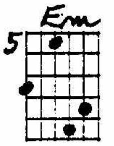
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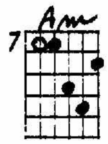
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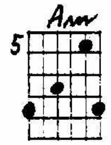
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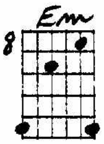
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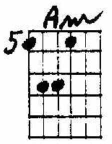
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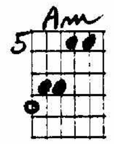
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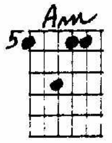
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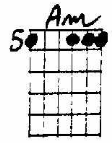
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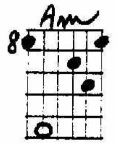
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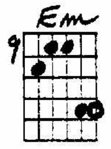
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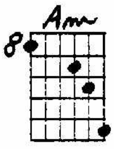
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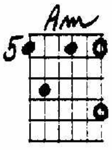
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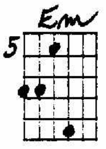
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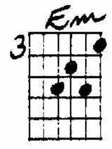
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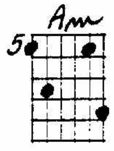
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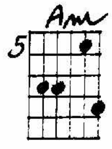
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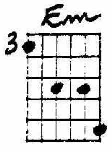
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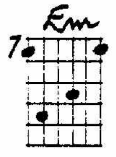
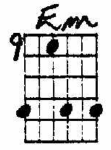

7
Em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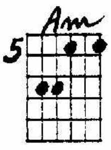
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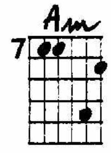
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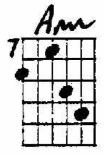
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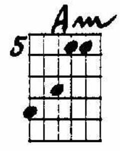
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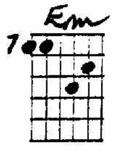
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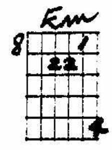
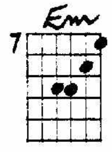

8
Em
2 2 1
4

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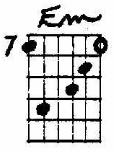
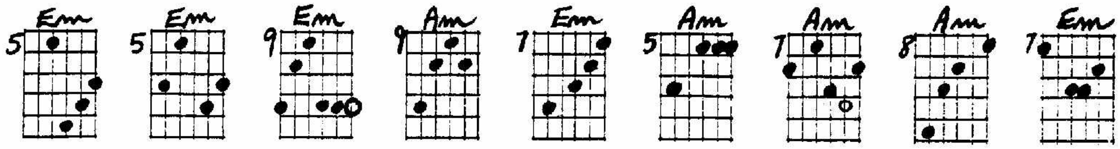
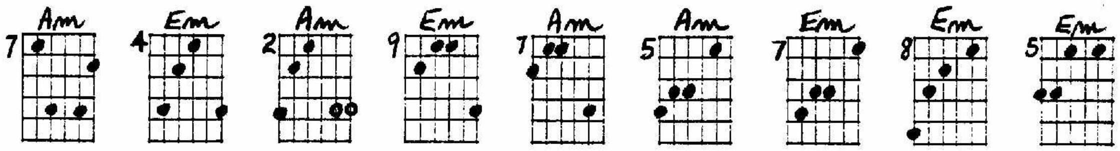
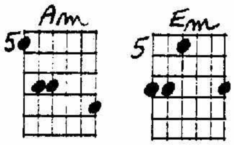
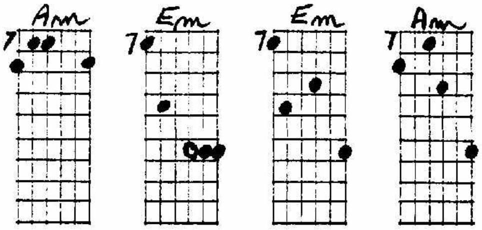

7
Em


5 Em
5 Em
9 Em
9 Am
7 Em
5 Am
7 Am
8 Am
7 Em

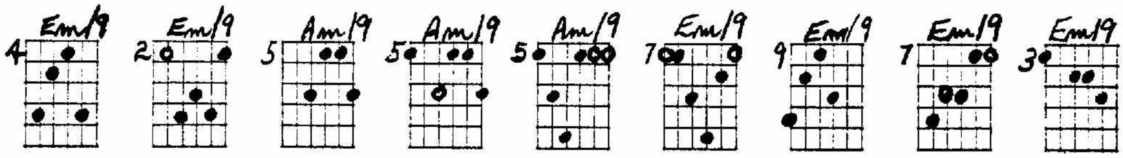

7 Am
4 Em
2 Am
9 Em
7 Am
5 Am
7 Em
8 Em
5 Em

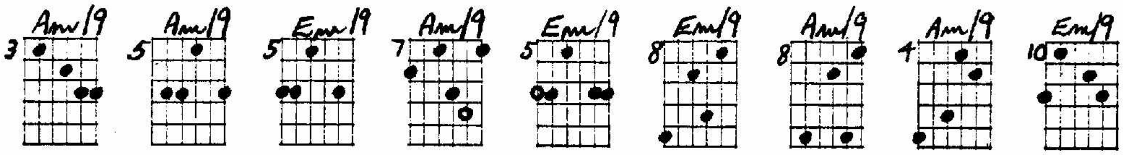


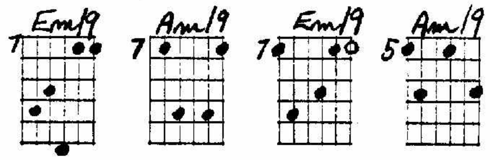

7 Am
7 Em
7 Em
7 Am

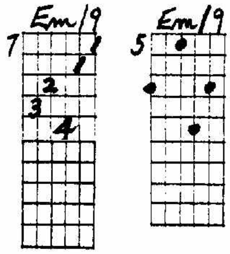
(m/9)

Minor Add 9th Chords (m add 9) (1,♭3,5,9)

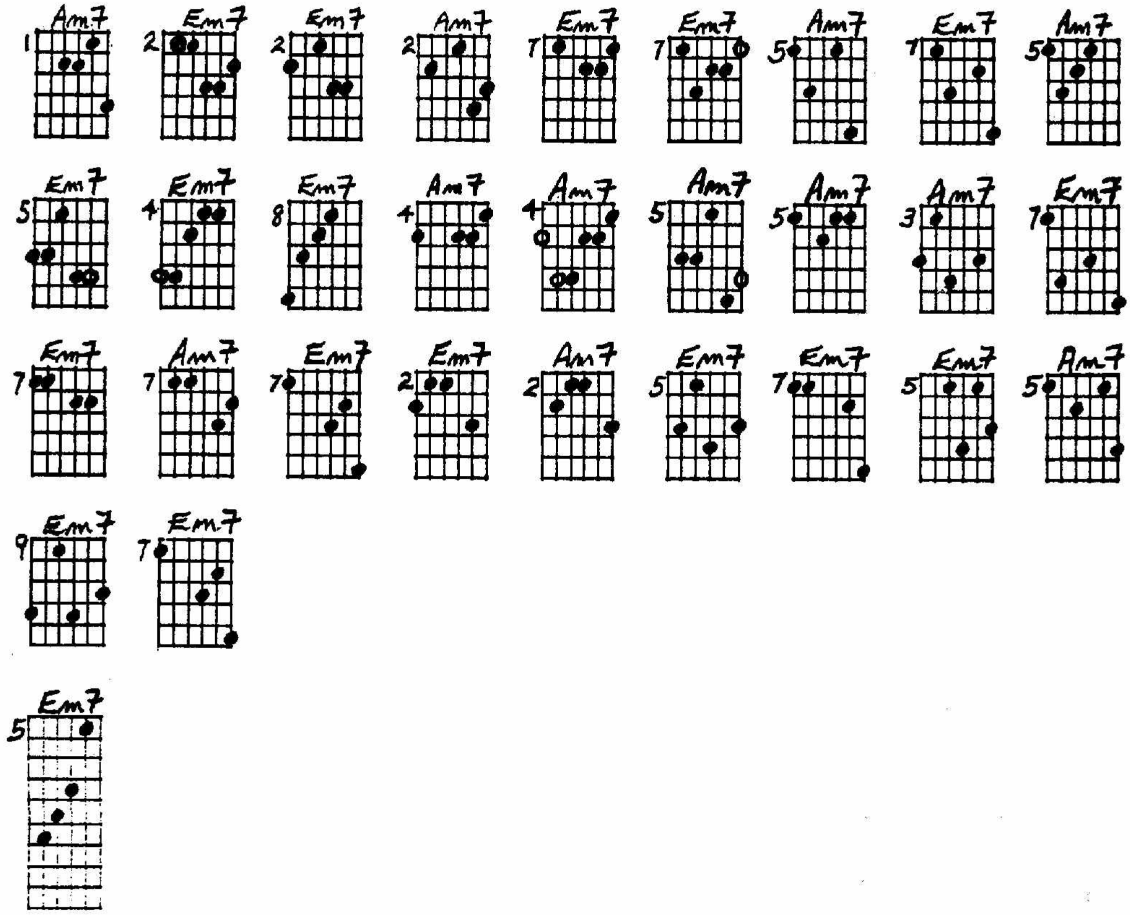

4 Em/9
2 Em/9
5 Am/9
5 Am/9
5 Am/9
7 Em/9
9 Em/9
7 Em/9
3 Em/9


3 Am/9
5 Am/9
5 Em/9
7 Am/9
5 Em/9
8 Em/9
8 Am/9
4 Am/9
10 Em/9

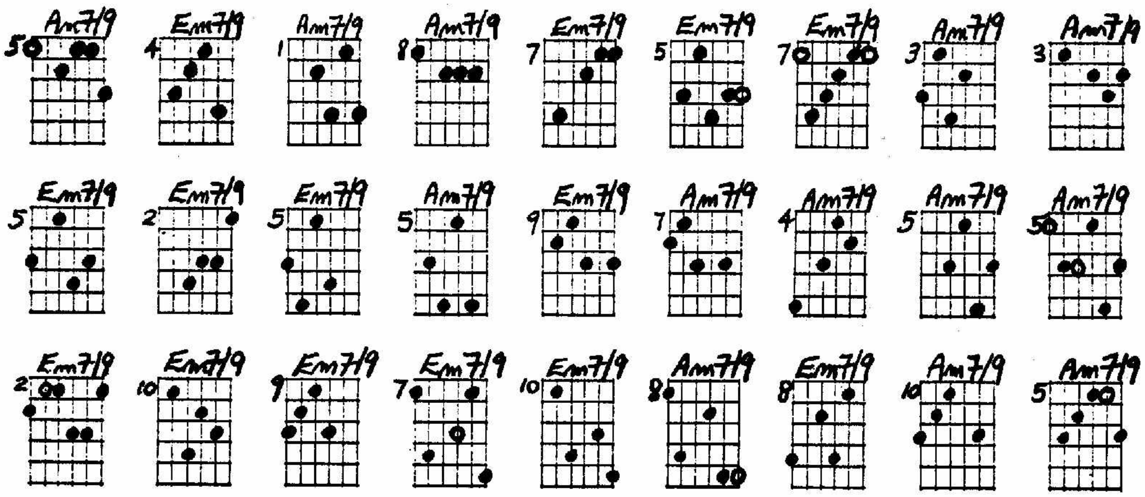

7 Em/9
7 Am/9
7 Em/9
5 Am/9

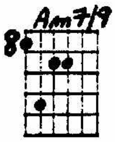

7 Em/9
1
2
3
4
5 Em/9

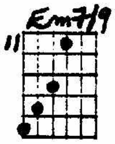
Minor Major 7th (m7, m♮7) (1,♭3,5,7)

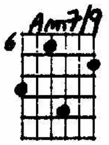

1 Am7
2 Em7
2 Em7
2 Am7
7 Em7
7 Em7
5 Am7
7 Em7
5 Am7
5 Em7
4 Em7
8 Em7
4 Am7
4 Am7
5 Am7
5 Am7
3 Am7
7 Em7
7 Em7
7 Am7
7 Em7
2 Em7
2 Am7
5 Em7
7 Em7
5 Em7
5 Am7
9 Em7
7 Em7
5 Em7

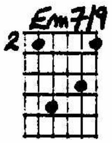
Minor Major 9th Chords (m7/9) (1,♭3,5,7,9)

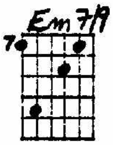

5 Am7/9
4 Em7/9
1 Am7/9
8 Am7/9
7 Em7/9
5 Em7/9
7 Em7/9
3 Am7/9
3 Am7/9
5 Em7/9
2 Em7/9
5 Em7/9
5 Am7/9
9 Em7/9
7 Am7/9
4 Am7/9
5 Am7/9
5 Am7/9
2 Em7/9
10 Em7/9
9 Em7/9
7 Em7/9
10 Em7/9
8 Am7/9
8 Em7/9
10 Am7/9
5 Am7/9

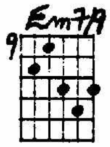


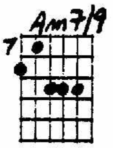


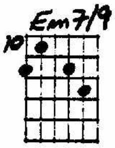


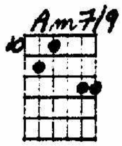


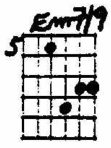


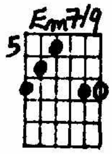


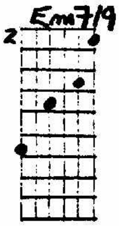


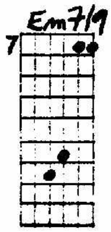


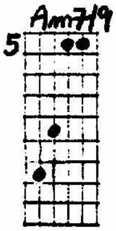




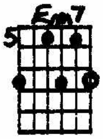


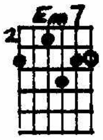


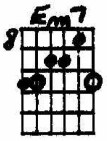


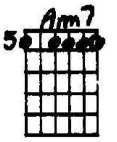


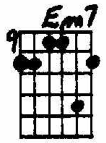
Minor 7th Chords (m7) (1,^{b}3,5,^{b}7)

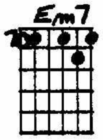


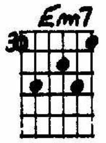


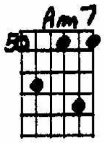


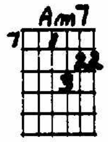


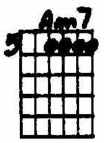


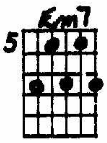


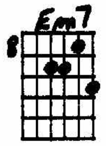


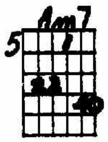


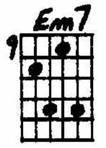


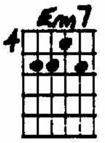


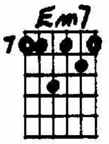


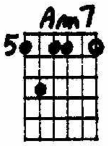


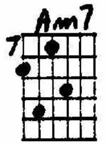


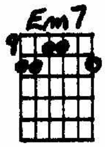


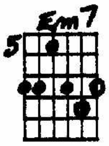


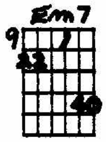


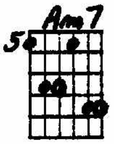


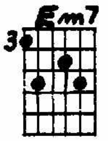


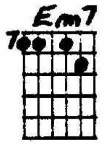


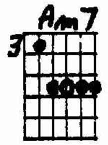


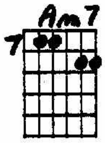


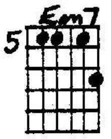


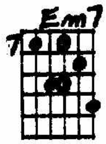


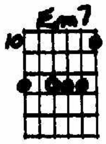


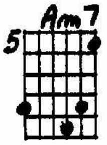


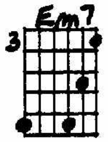


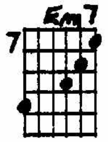


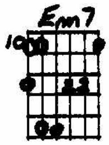


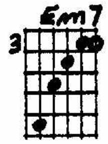


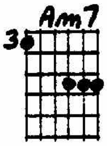


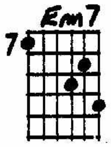


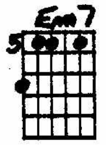


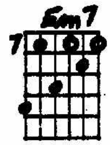


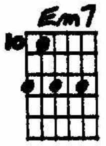


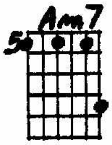


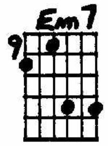


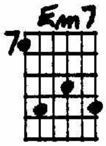


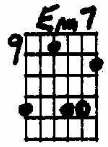


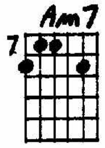


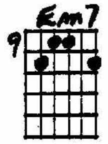


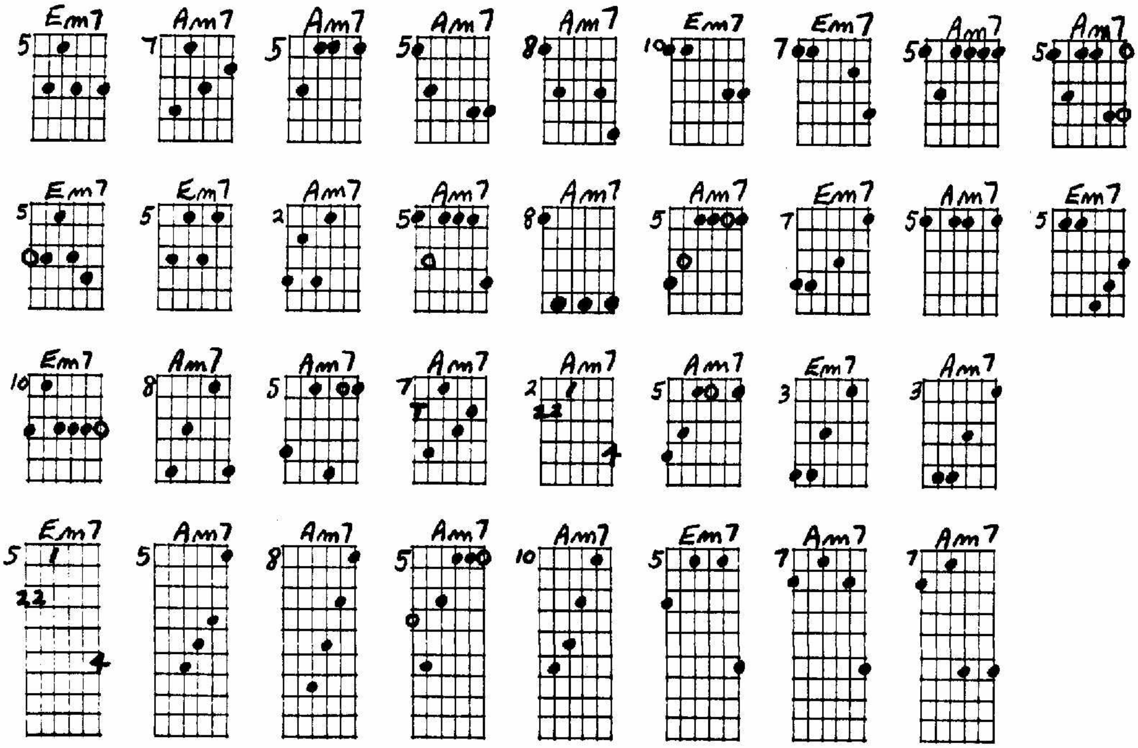




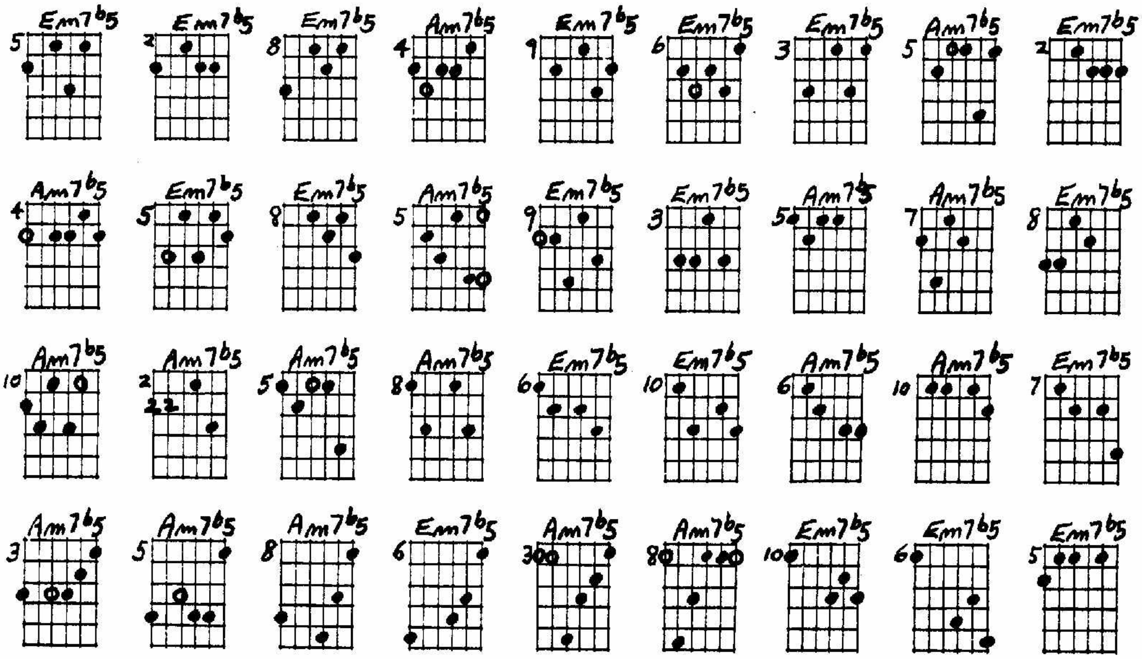


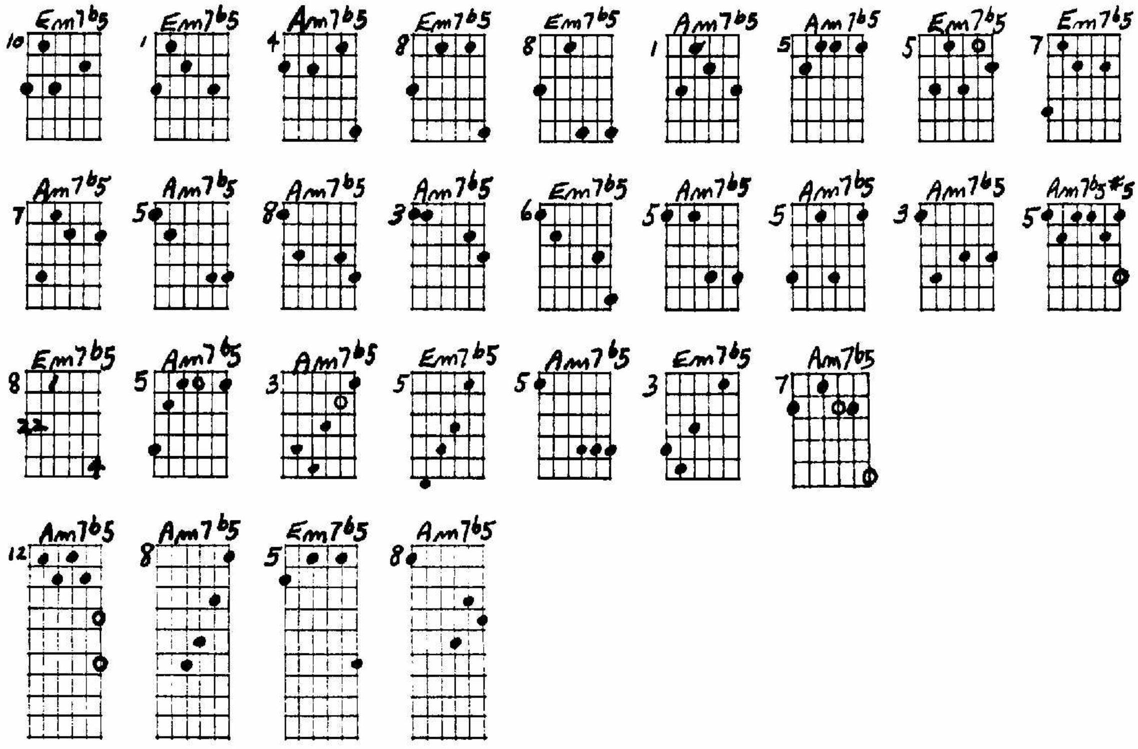




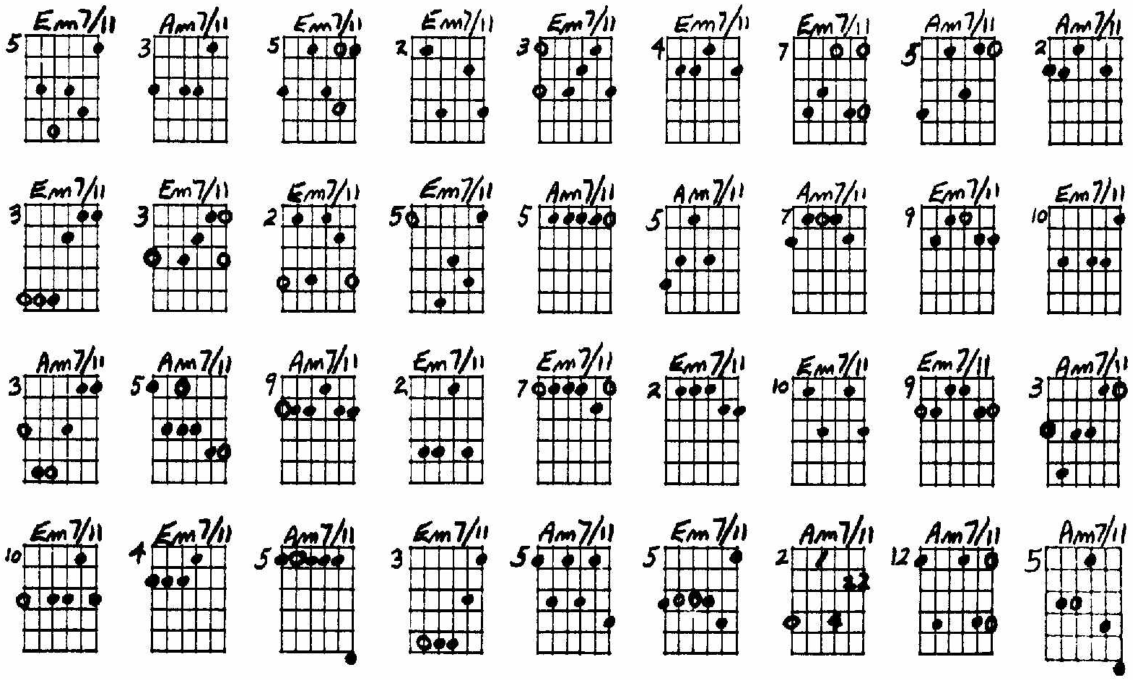

5 Em7
7 Am7
5 Am7
5 Am7
8 Am7
10 Em7
7 Em7
5 Am7
5 Am7
5 Em7
5 Em7
2 Am7
5 Am7
8 Am7
5 Am7
7 Em7
5 Am7
5 Em7
10 Em7
8 Am7
5 Am7
7 Am7
T
2 Am7
1
22
4
5 Am7
3 Em7
3 Am7
5 Em7
1
22
4
5 Am7
8 Am7
5 Am7
10 Am7
5 Em7
7 Am7
7 Am7

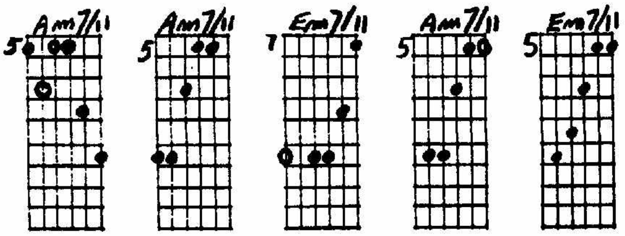
Minor 7th^{b}5 Chords (m7^{b}5) (1^{b},3^{b},5^{b},7)


5 Em7b5
2 Em7b5
8 Em7b5
4 Am7b5
9 Em7b5
6 Em7b5
3 Em7b5
5 Am7b5
2 Em7b5
4 Am7b5
5 Em7b5
8 Em7b5
5 Am7b5
9 Em7b5
3 Em7b5
5 Am7b5
7 Am7b5
8 Em7b5
10 Am7b5
2 Am7b5
22
5 Am7b5
8 Am7b5
6 Em7b5
10 Em7b5
6 Am7b5
10 Am7b5
7 Em7b5
3 Am7b5
5 Am7b5
8 Am7b5
6 Em7b5
3 Am7b5
8 Am7b5
10 Em7b5
6 Em7b5
5 Em7b5

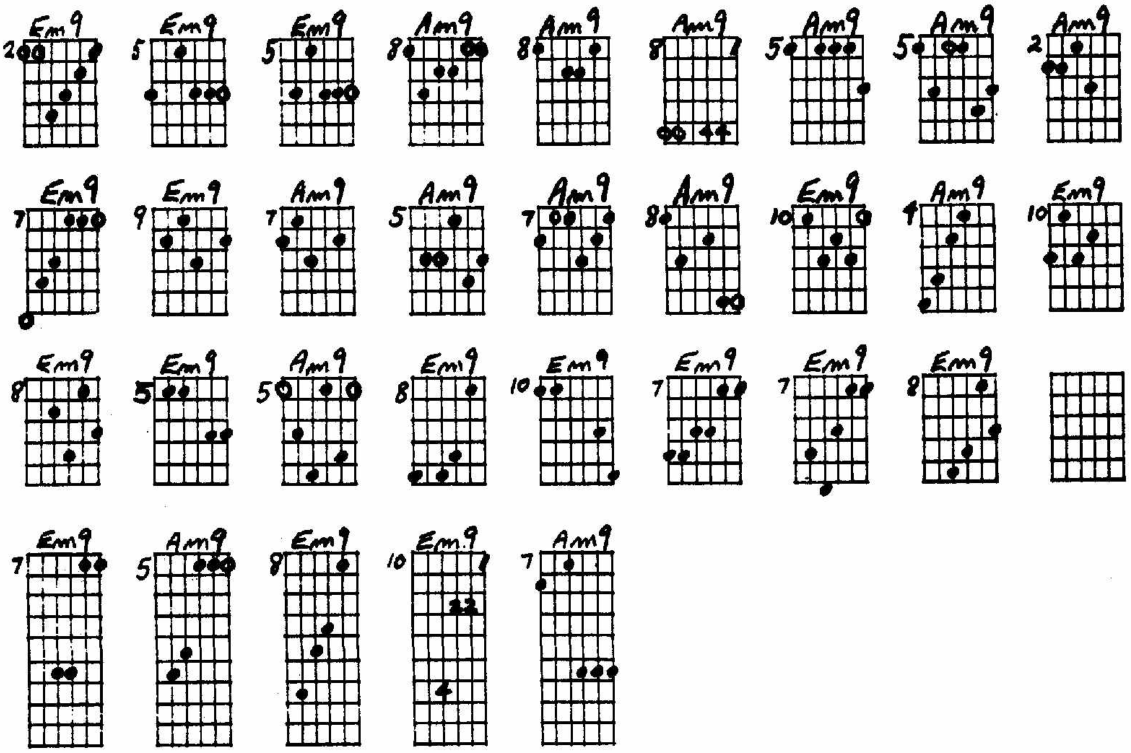

10 Em7b5
1 Em7b5
4 Am7b5
8 Em7b5
8 Em7b5
1 Am7b5
5 Am7b5
5 Em7b5
7 Em7b5
7 Am7b5
5 Am7b5
8 Am7b5
3 Am7b5
6 Em7b5
5 Am7b5
5 Am7b5
3 Am7b5
5 Am7b5#5
8 Em7b5
1
2 2
4
5 Am7b5
3 Am7b5
5 Em7b5
5 Am7b5
3 Em7b5
7 Am7b5
12 Am7b5
8 Am7b5
5 Em7b5
8 Am7b5

Minor 7/11 Chords (1,^{b}3,5,^{b}7,11)

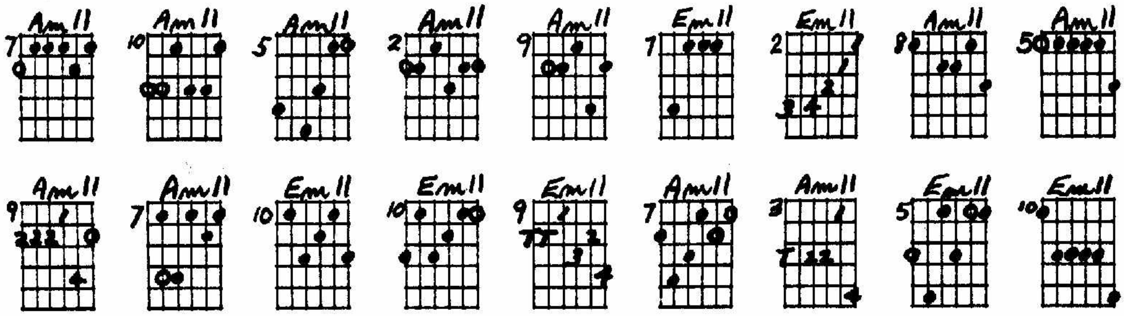

5 Em7/11
3 Am7/11
5 Em7/11
2 Em7/11
3 Em7/11
4 Em7/11
7 Em7/11
5 Am7/11
2 Am7/11
3 Em7/11
3 Em7/11
2 Em7/11
5 Em7/11
5 Am7/11
5 Am7/11
7 Am7/11
9 Em7/11
10 Em7/11
3 Am7/11
5 Am7/11
9 Am7/11
2 Em7/11
7 Em7/11
2 Em7/11
10 Em7/11
9 Em7/11
3 Am7/11
10 Em7/11
4 Em7/11
5 Am7/11
3 Em7/11
5 Am7/11
5 Em7/11
2 Am7/11
1
2 2
4
12 Am7/11
5 Am7/11

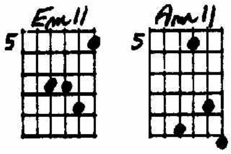

Am7/11
5
Am7/11
5
Em7/11
7
Am7/11
5
Em7/11
5

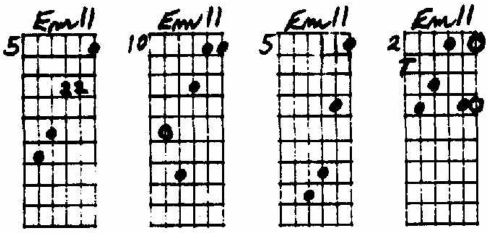
Minor 9th (m9) (1,^{b}3,5,^{b}7,9)


Em9
2
Em9
5
Em9
5
Am9
8
Am9
8
Am9
8
Am9
5
Am9
5
Am9
2
Em9
7
Em9
9
Am9
7
Am9
5
Am9
7
Am9
8
Em9
10
Am9
4
Em9
10
Em9
8
Em9
5
Am9
5
Em9
8
Em9
10
Em9
7
Em9
7
Em9
8
Em9
7
Am9
5
Em9
8
Em9
10
1
2 2
4
Am9
7

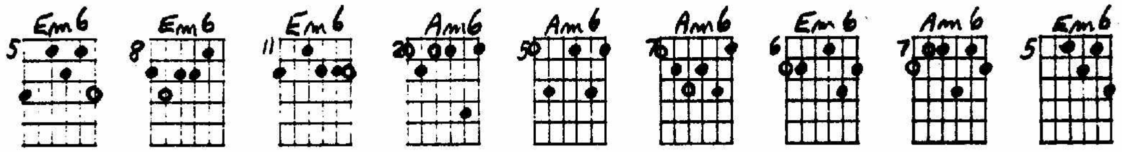
Minor 11th Chords (m11) (1,^{b}3,5,^{b}7,9,11)

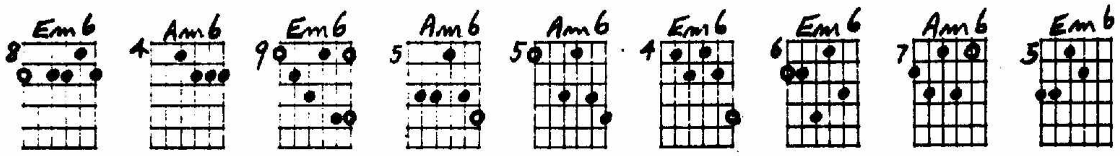

Am11
7
Am11
10
Am11
5
Am11
2
Am11
9
Em11
7
Em11
2
1
2
3 4
Am11
8
Am11
5
Am11
9
1
2 2 2
4
Am11
7
Em11
10
Em11
10
Em11
9
1
1 1
2
3
4
Am11
7
Am11
3
1
1 2 2
4
Em11
5
Em11
10

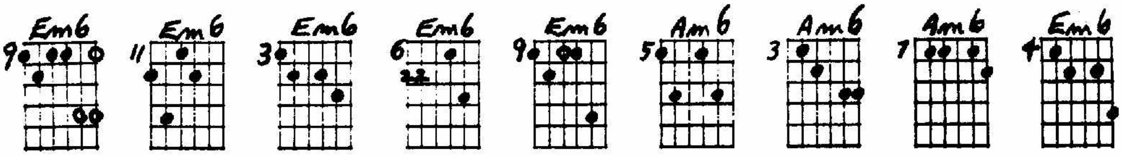

5 Em11
5 Am11

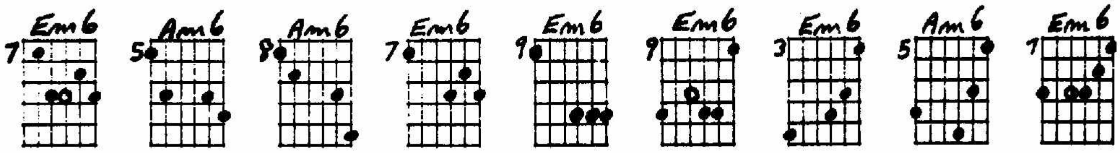

5 Em11
10 Em11
5 Em11
2 Em11

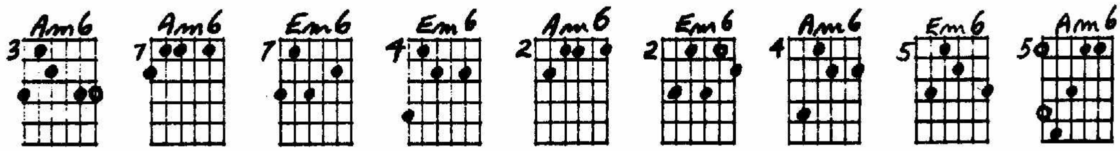
Minor 6th (m6) (1,$^b3$,5,6) and Minor 6th/9th Chords (m6/9) (1,$^b3$,5,6,9)

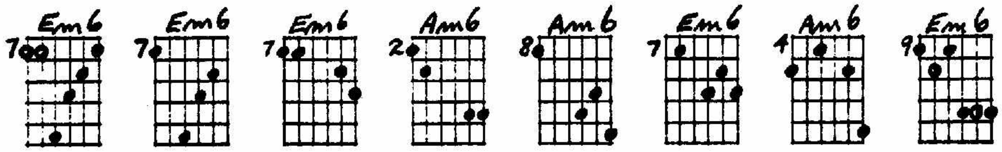

5 Em6
8 Em6
11 Em6
2 Am6
5 Am6
7 Am6
6 Em6
7 Am6
5 Em6

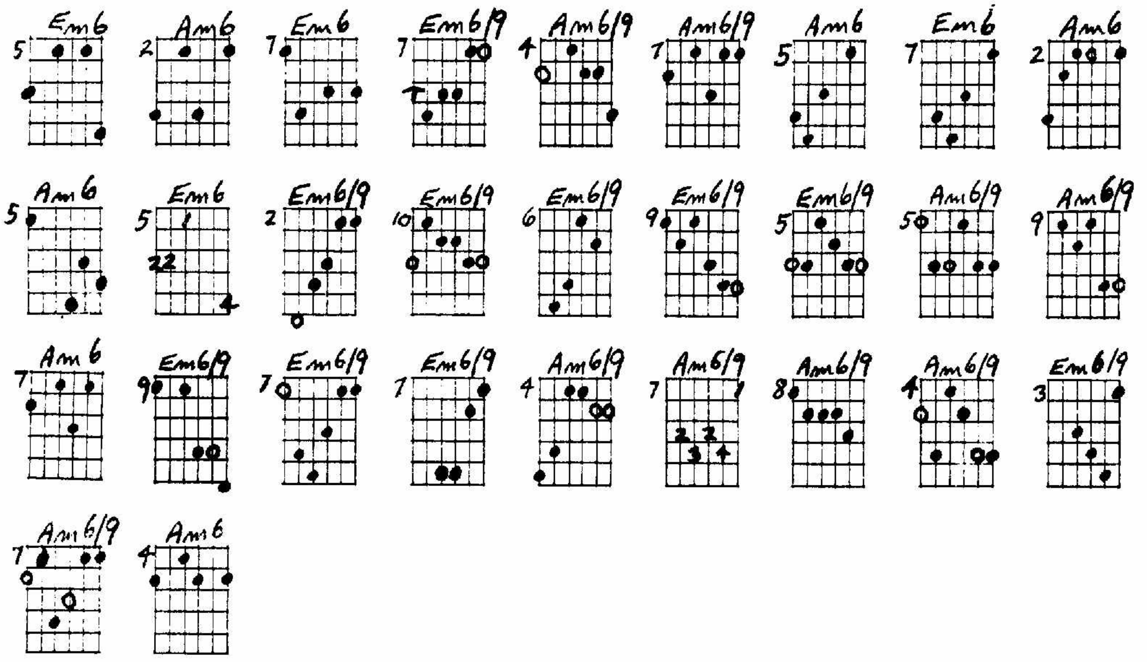

8 Em6
4 Am6
9 Em6
5 Am6
5 Am6
4 Em6
6 Em6
7 Am6
5 Em6

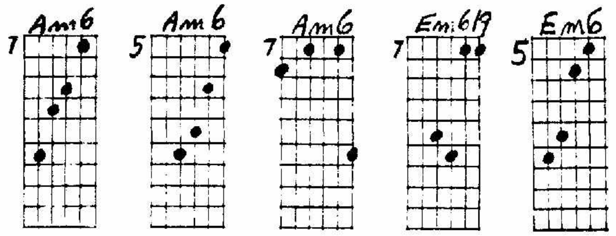

9 Em6
11 Em6
3 Em6
6 Em6
9 Em6
5 Am6
3 Am6
7 Am6
4 Em6


7 Em6
5 Am6
8 Am6
7 Em6
9 Em6
9 Em6
3 Em6
5 Am6
7 Em6


3 Am6
7 Am6
7 Em6
4 Em6
2 Am6
2 Em6
4 Am6
5 Em6
5 Am6

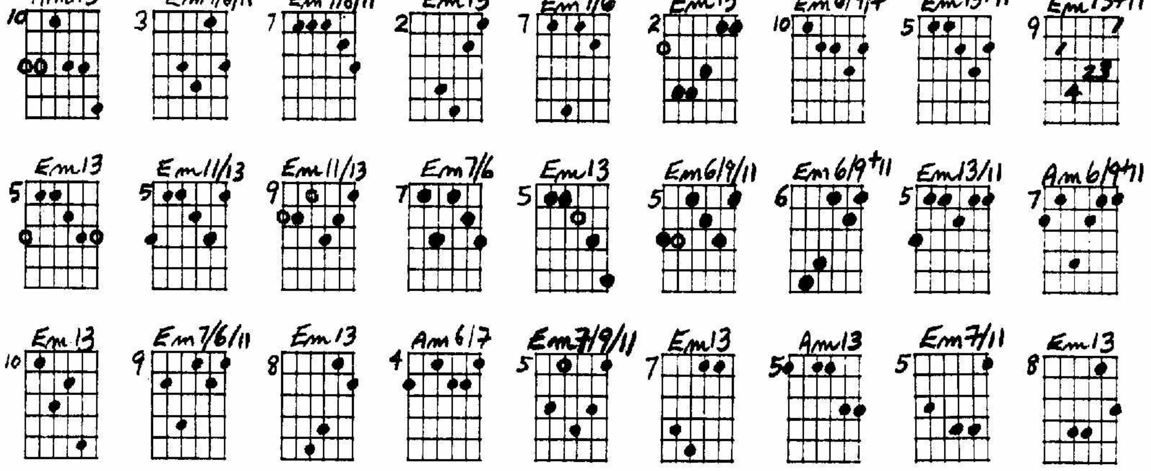

7 Em6
7 Em6
7 Em6
2 Am6
8 Am6
7 Em6
4 Am6
9 Em6

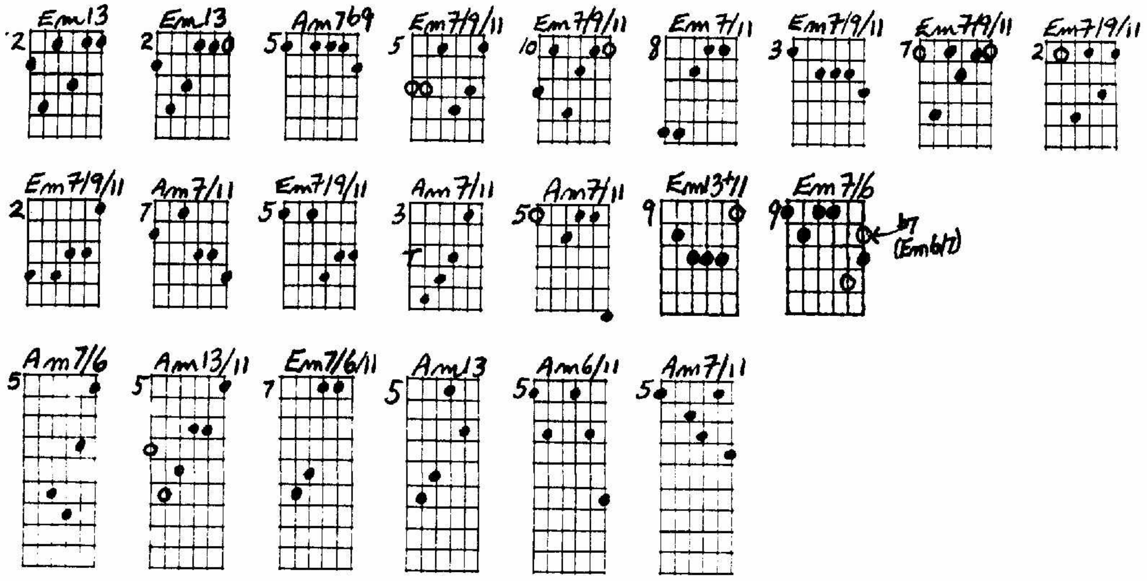

Em6
5
Am6
2
Em6
7
Em6/9
7
Am6/9
4
Am6/9
7
Am6
5
Em6
7
Am6
2
Am6
5
Em6
5
1
22
4
Em6/9
2
Em6/9
10
Em6/9
6
Em6/9
9
Em6/9
5
Am6/9
5
Am6/9
9
Am6
7
Em6/9
9
Em6/9
7
Em6/9
7
Am6/9
4
Am6/9
7
1
2 2
3 4
Am6/9
8
Am6/9
4
Em6/9
3
Am6/9
7
Am6
4


Am6
7
Am6
5
Am6
7
Em6/9
7
Em6
5

Note: Em7/11 (no root) is the same as B7+. Only m7/11s with roots will be listed here, and you can find the 7+ chords in the dominant section.

Minor 11/13 (m11/13) (1,^{b}3,5,^{b}7,9,11,13), Minor 13 (m13) (1, ^{b}3,5, ^{b}7,9,11,13) and Other Weird Chords


Am13
10
Em7/6/11
3
Em7/6/11
7
Em13
2
Em7/6
7
Em13
2
Em6/9/7
10
Em13+11
5
Em13+11
9
7
1
23
4
Em13
5
Em11/13
5
Em11/13
9
Em7/6
7
Em13
5
Em6/9/11
5
Em6/9+11
6
Em13/11
5
Am6/9+11
7
Em13
10
Em7/6/11
9
Em13
8
Am6/7
4
Em7/9/11
5
Em13
7
Am13
5
Em7/11
5
Em13
8

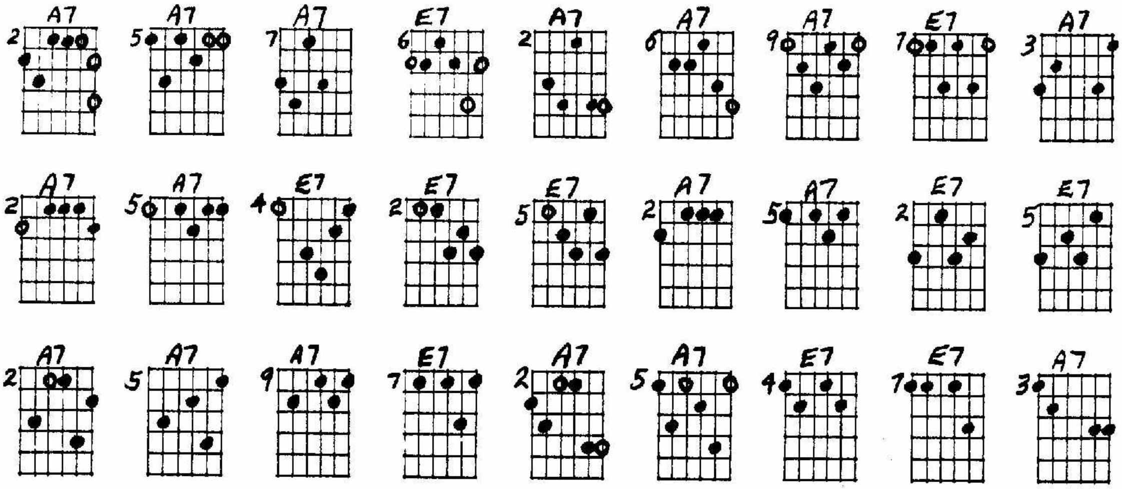

Em13
2
Em13
2
Am7b9
5
Em7/9/11
5
Em7/9/11
10
Em7/11
8
Em7/9/11
3
Em7/9/11
7
Em7/9/11
2
Em7/9/11
2
Am7/11
7
Em7/9/11
5
Am7/11
3
Am7/11
5
Em13+11
9
Em7/6
9
b7
(Em6/7)
Am7/6
5
Am13/11
5
Em7/6/11
7
Am13
5
Am6/11
5
Am7/11
5

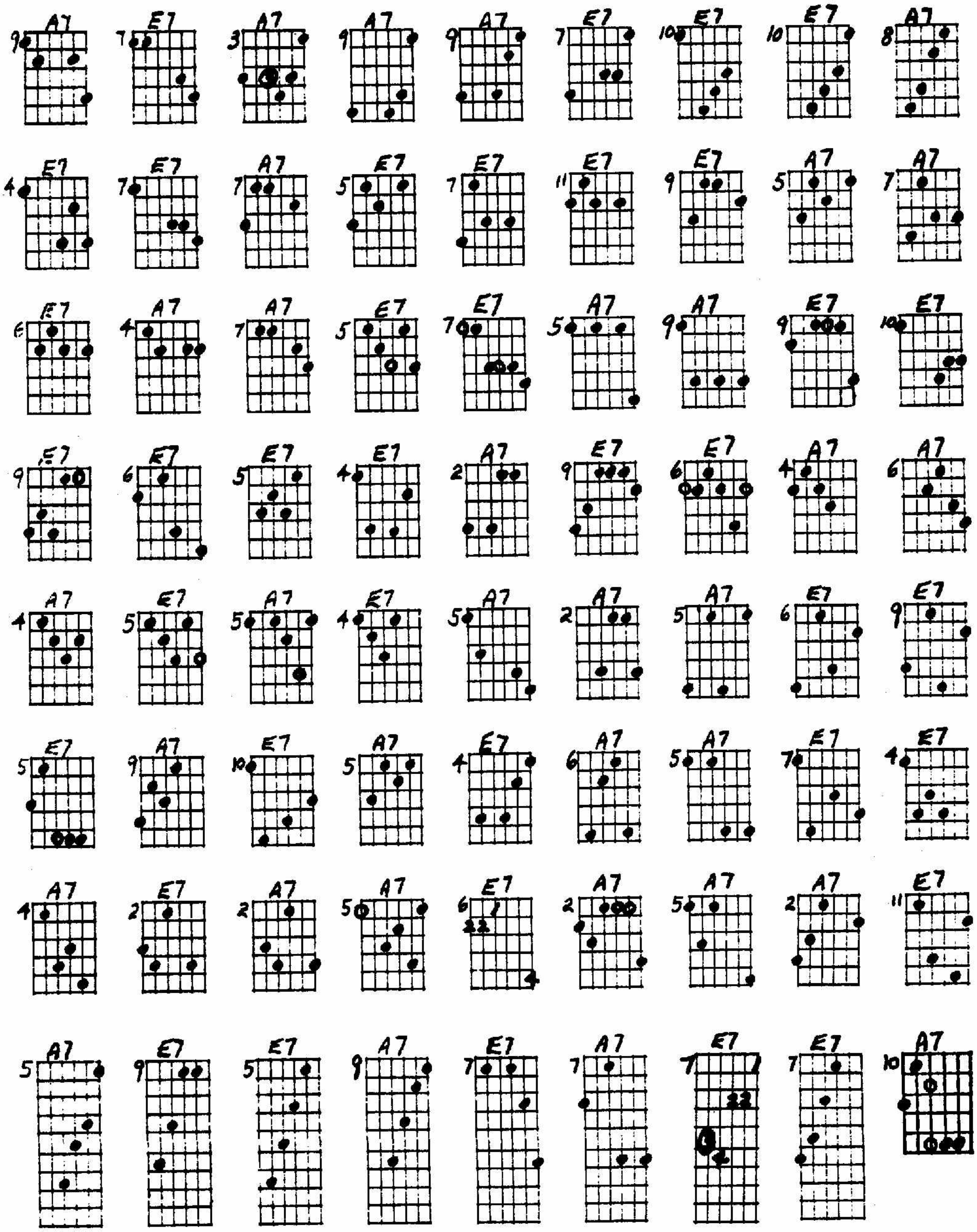
Dominant Chords

There are more dominant chords, by far, than major or minor types. There are also quite a few amazing relationships within this family. As said before, don't try to absorb the complex ideas until you have gotten the basics down pretty well.

The section on chord substitutions and the progressions should help you to understand how to use all the chords in due time.

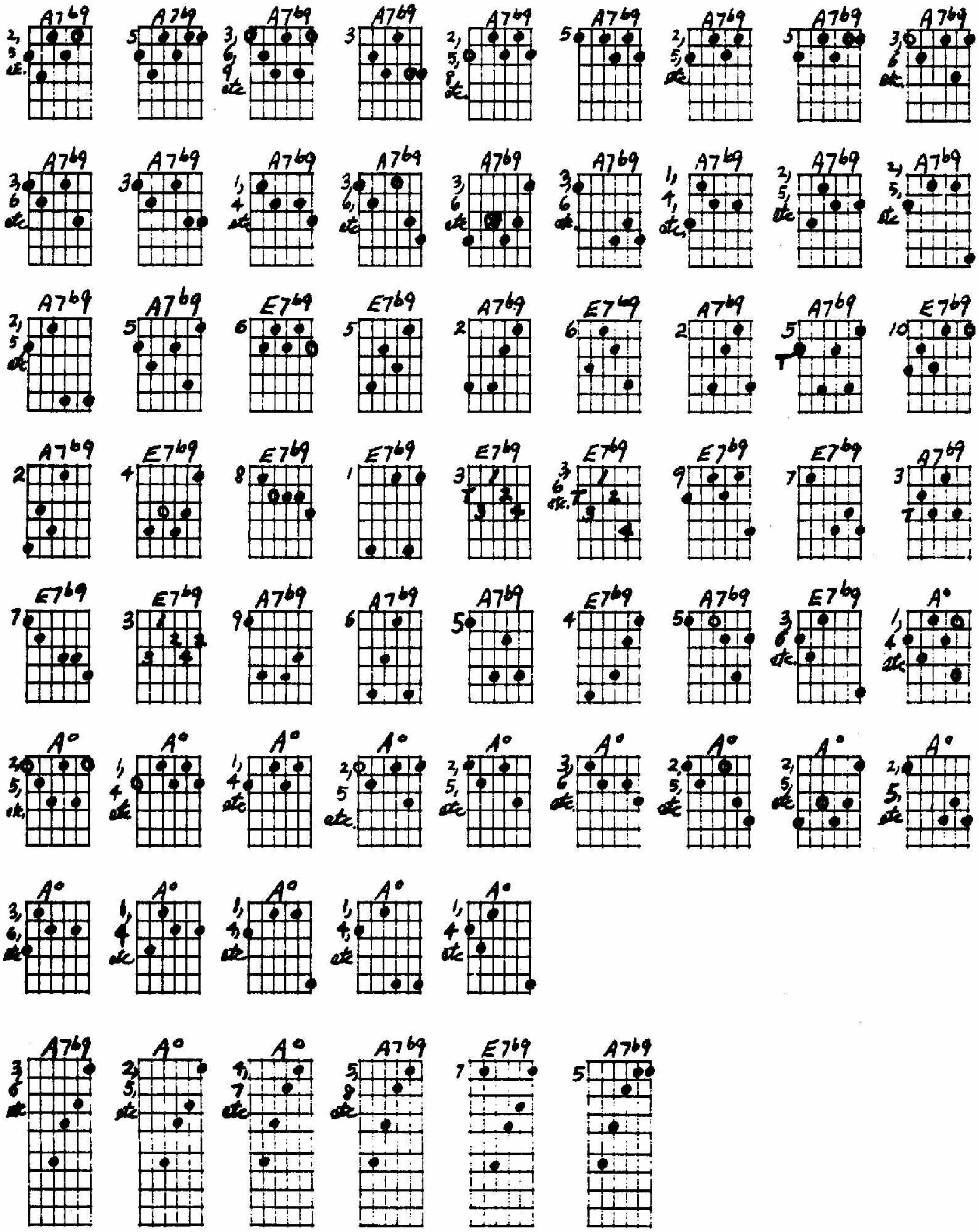
Dominant 7th Chords (7) (135^{b}7)


A7
2
A7
5
A7
7
E7
6
A7
2
A7
6
A7
9
E7
7
A7
3
A7
2
A7
5
E7
4
E7
2
E7
5
A7
2
A7
5
E7
2
E7
5
A7
2
A7
5
A7
9
E7
7
A7
2
A7
5
E7
4
E7
7
A7
3


9 A7
7 E7
3 A7
9 A7
9 A7
7 E7
10 E7
10 E7
8 A7
4 E7
7 E7
7 A7
5 E7
7 E7
11 E7
9 E7
5 A7
7 A7
6 E7
4 A7
7 A7
5 E7
7 E7
5 A7
9 A7
9 E7
10 E7
9 E7
6 E7
5 E7
4 E7
2 A7
9 E7
6 E7
4 A7
6 A7
4 A7
5 E7
5 A7
4 E7
5 A7
2 A7
5 A7
6 E7
9 E7
5 E7
9 A7
10 E7
5 A7
4 E7
6 A7
5 A7
7 E7
4 E7
4 A7
2 E7
2 A7
5 A7
6 E7
1
2 2
4
2 A7
5 A7
2 A7
11 E7
5 A7
9 E7
5 E7
9 A7
7 E7
7 A7
7 E7
1
2 2
4
2
7 E7
10 A7

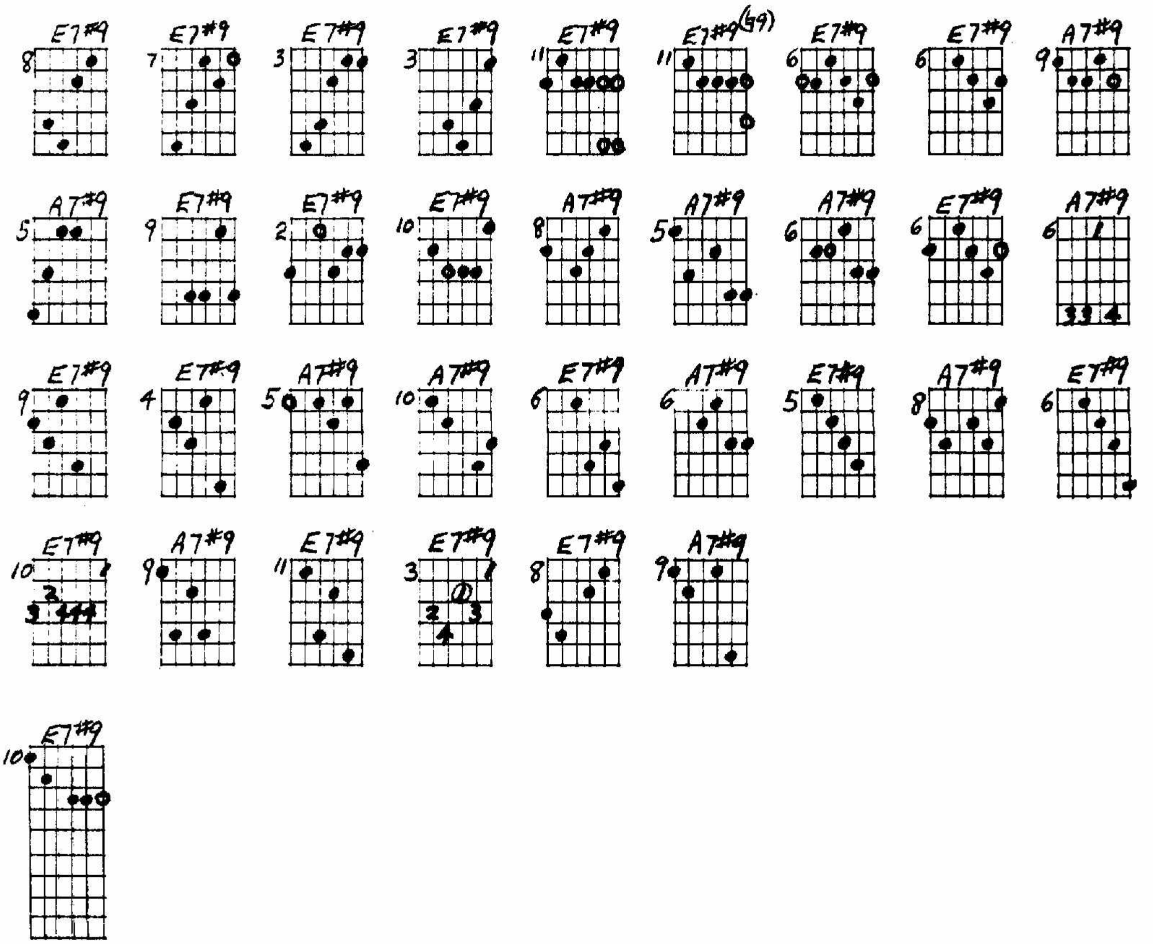
Dominant 7th^{b}9 (7^{b}9) (135^{b}7^{b}9) and Diminished 7th Chords (°) (1^{b}3^{b}56)

No 3 note diminished chords will be listed.


A7b9 A7b9 A7b9 A7b9 A7b9 A7b9 A7b9 A7b9 A7b9
A7b9 A7b9 A7b9 A7b9 A7b9 A7b9 A7b9 A7b9 A7b9
A7b9 A7b9 E7b9 E7b9 A7b9 E7b9 A7b9 A7b9 E7b9
A7b9 E7b9 E7b9 E7b9 E7b9 E7b9 E7b9 E7b9 A7b9
E7b9 E7b9 A7b9 A7b9 A7b9 E7b9 A7b9 E7b9 A°
A° A° A° A° A° A° A° A° A°
A° A° A° A° A°
A7b9 A° A° A7b9 E7b9 A7b9

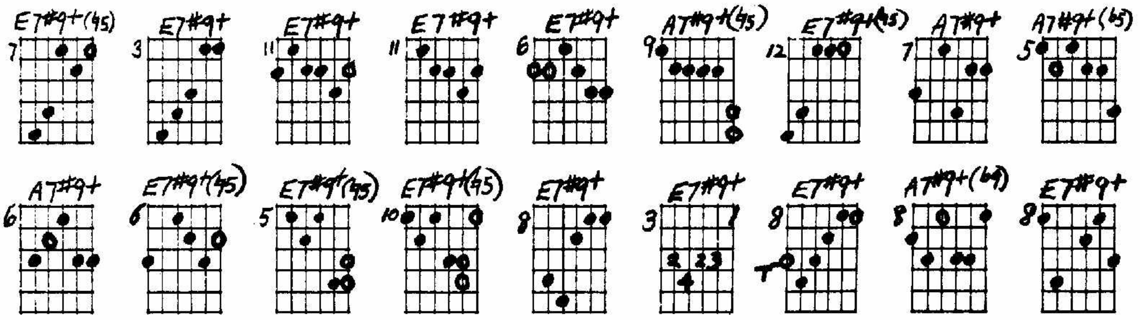
Dominant 7$^{\#}$9 Chords (7$^{\#}$9) (135^{b}7$^{\#}$9)

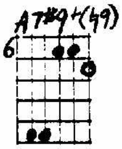
See 13^{b}9 chords.

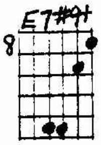

E7#9 8
E7#9 7
E7#9 3
E7#9 3
E7#9 11
E7#9(b9) 11
E7#9 6
E7#9 6
A7#9 9
A7#9 5
E7#9 9
E7#9 2
E7#9 10
A7#9 8
A7#9 5
A7#9 6
E7#9 6
A7#9 6 1 3 3 4
E7#9 9
E7#9 4
A7#9 5
A7#9 10
E7#9 6
A7#9 6
E7#9 5
A7#9 8
E7#9 6
E7#9 10 1 2 3 4 4 4
A7#9 9
E7#9 11
E7#9 3 1 ① 2 3 4
E7#9 8
A7#9 9
E7#9 10

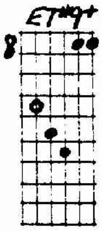
Dominant 7$^{\#}$9$^{\#}$5 (7$^{\#}$9+)(13$^{\#}$5^{b}7$^{\#}$9)

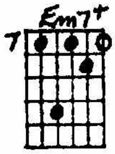
Notice the relationship between E7$^{\#}$9$^{\#}$5 and B^{b}13+11

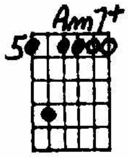

E7#9+(b5) 7
E7#9+ 3
E7#9+ 11
E7#9+ 11
E7#9+ 6
A7#9+(b5) 9
E7#9+(b5) 12
A7#9+ 7
A7#9+(b5) 5
A7#9+ 6
E7#9+(b5) 6
E7#9+(b5) 5
E7#9+(b5) 10
E7#9+ 8
E7#9+ 3 1 2 3 3 4
E7#9+ 8 T
A7#9+(b9) 8
E7#9+ 8

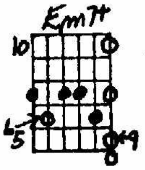


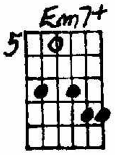




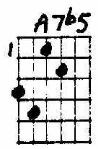


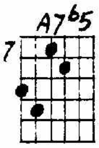


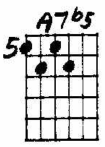

Em7+
10
6-7
5
b9

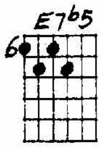


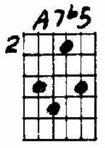
Dominant 7th^{b}5 Chords (7^{b}5) (13^{b}5^{b}7)

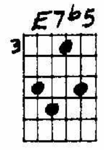


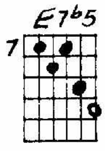


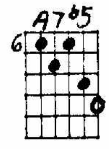


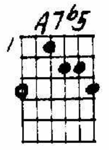


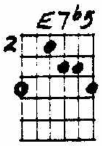


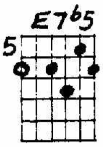


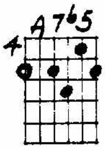


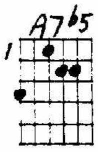


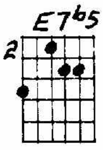


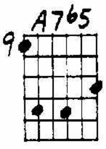


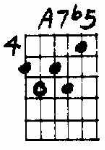


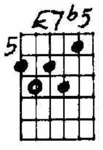


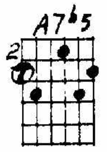


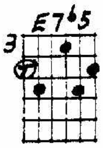


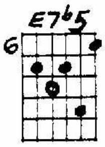


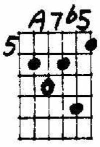


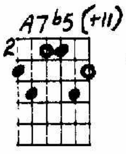


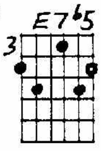


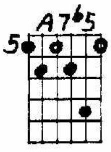


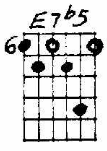


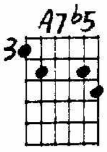


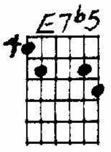


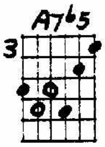


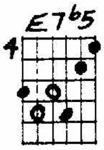


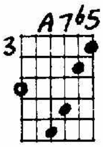


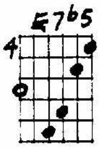


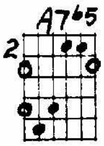


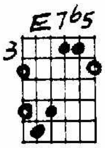


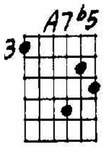


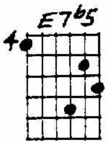


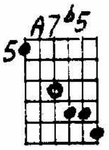


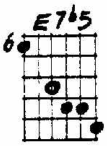


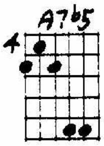


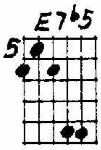


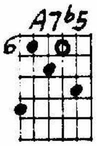


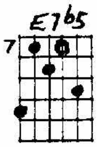


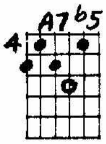


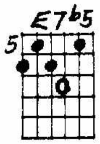


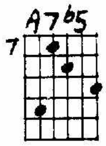


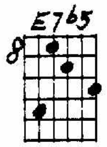


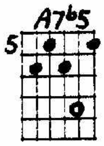


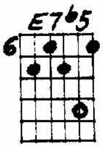


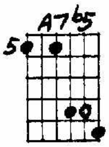


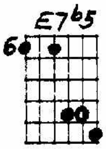


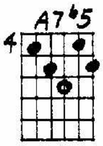


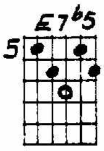


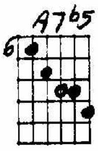


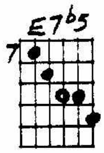


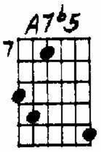


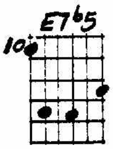


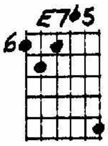


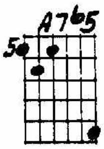


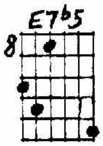




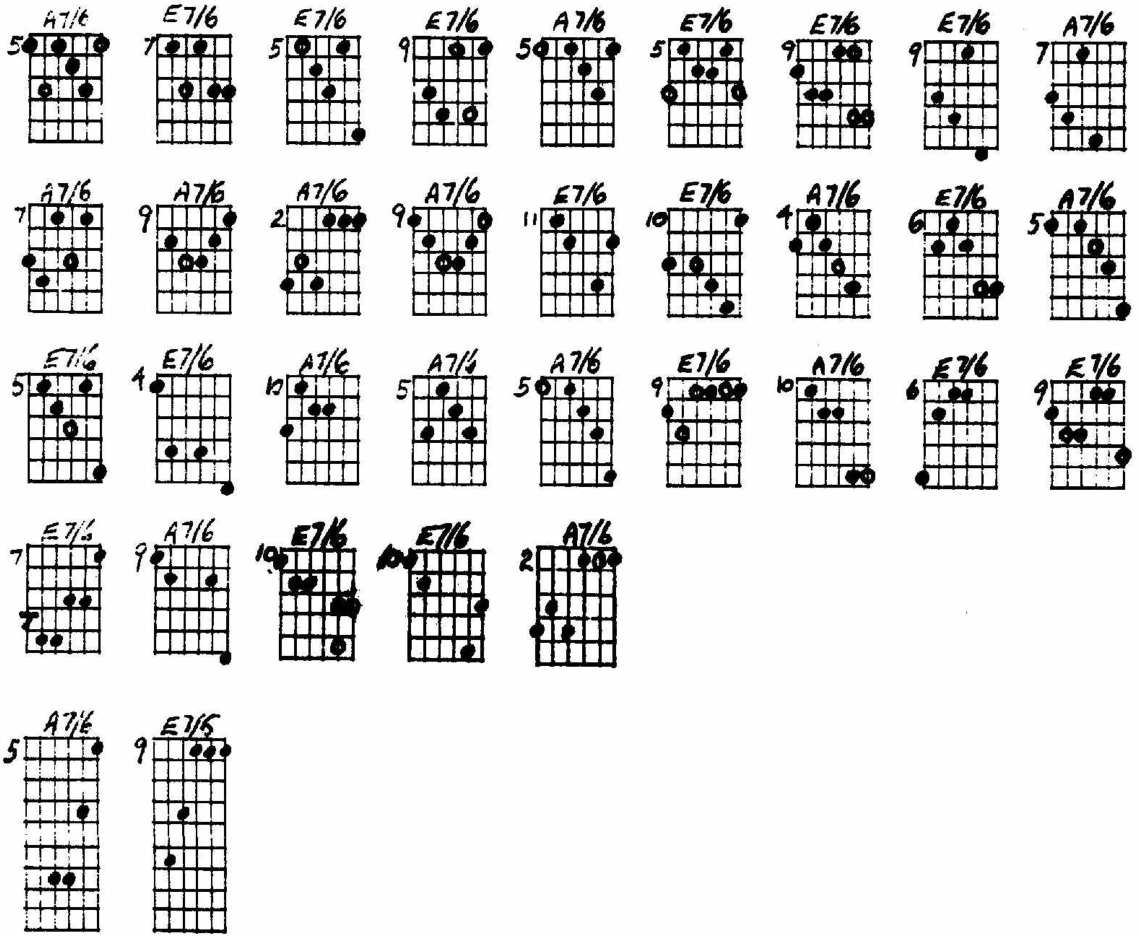






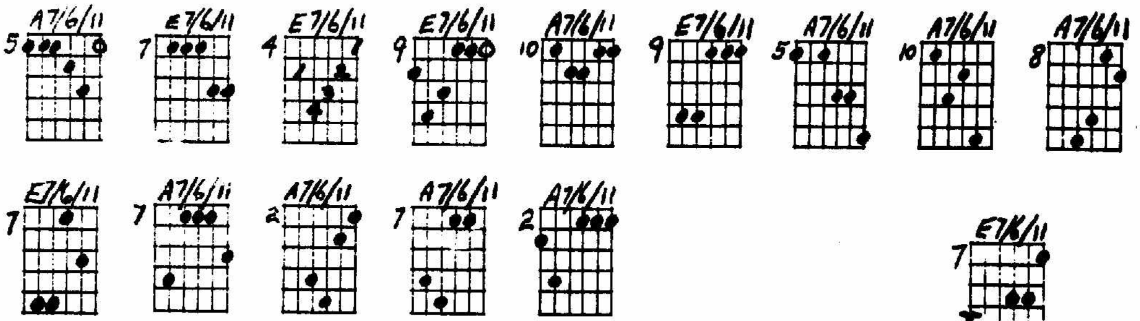


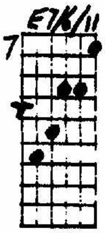
Dominant 7/6th (7/6) (135^{b}7 13)


A7/6 5
E7/6 7
E7/6 5
E7/6 9
A7/6 5
E7/6 5
E7/6 9
E7/6 9
A7/6 7
A7/6 7
A7/6 9
A7/6 2
A7/6 9
E7/6 11
E7/6 10
A7/6 4
E7/6 6
A7/6 5
E7/6 5
E7/6 4
A7/6 10
A7/6 5
A7/6 5
E7/6 9
A7/6 10
E7/6 6
E7/6 9
E7/6 7
A7/6 9
E7/6 10
E7/6 10
A7/6 2
A7/6 5
E7/5 9

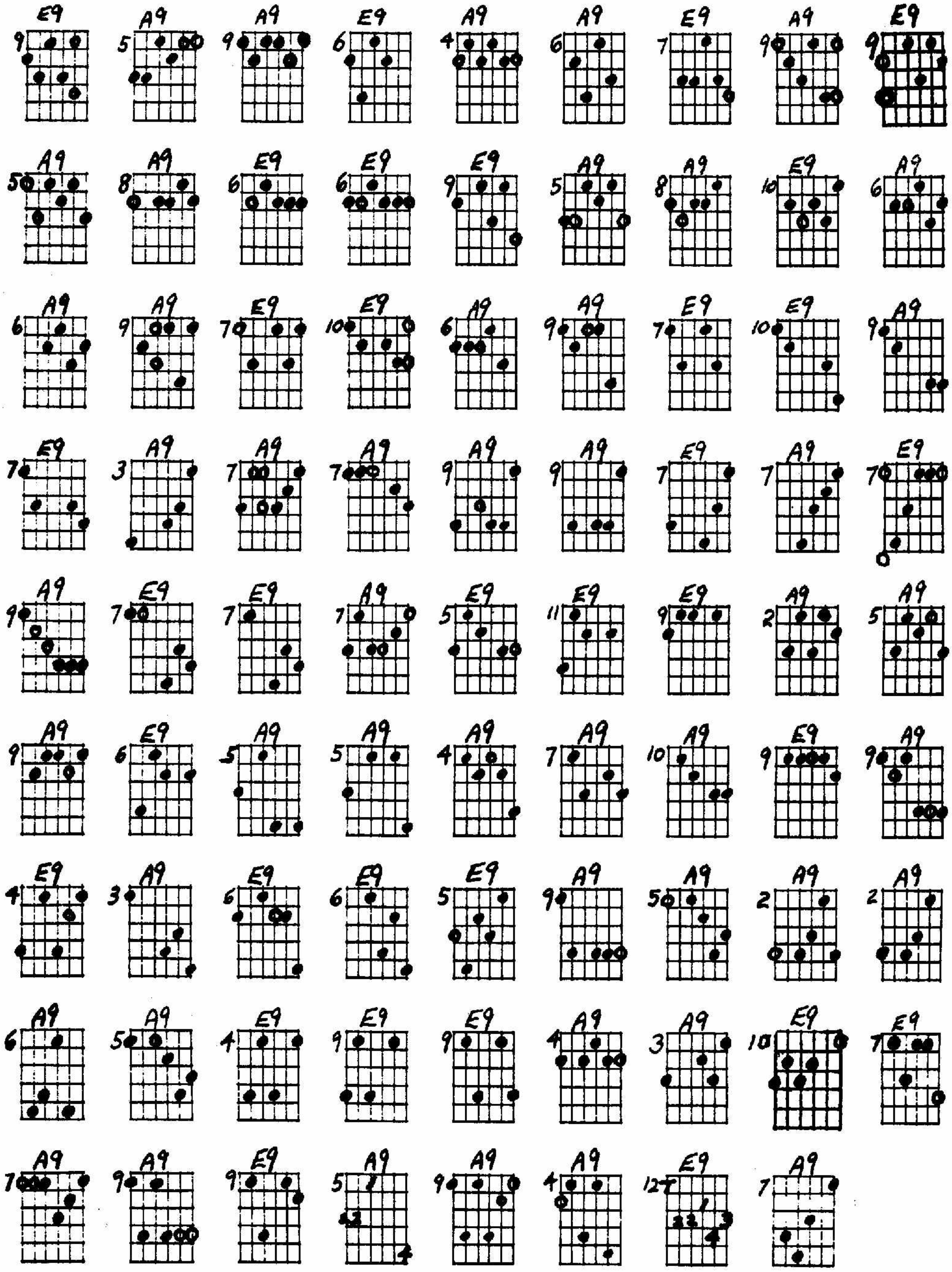
Dominant 7/6/11th (7/6/11) (135^{b} 7 11 13)

Notice the relationship between A7/6/11, Em13, Em13/11, G7^{+11} (no 3rd) and G9+11 (no 3rd)


A7/6/11 5
E7/6/11 7
E7/6/11 4
1 2 3 4
E7/6/11 9
A7/6/11 10
E7/6/11 9
A7/6/11 5
A7/6/11 10
A7/6/11 8
E7/6/11 7
A7/6/11 7
A7/6/11 2
A7/6/11 7
A7/6/11 2



Dominant 9th (9) (135^{b}79)


E9 9
A9 5
A9 9
E9 6
A9 4
A9 6
E9 7
A9 9
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A9 5
A9 8
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E9 6
E9 9
A9 5
A9 8
E9 10
A9 6
A9 6
A9 9
E9 7
E9 10
A9 6
A9 9
E9 7
E9 10
A9 9
E9 7
A9 3
A9 7
A9 7
A9 9
A9 9
E9 7
A9 7
E9 7
A9 9
E9 7
E9 7
A9 7
E9 5
E9 11
E9 9
A9 2
A9 5
A9 9
E9 6
A9 5
A9 5
A9 4
A9 7
A9 10
E9 9
A9 9
E9 4
A9 3
E9 6
E9 6
E9 5
A9 9
A9 5
A9 2
A9 2
A9 6
A9 5
E9 4
E9 9
E9 9
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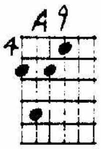
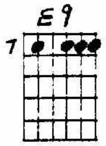
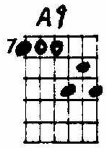
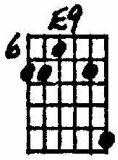
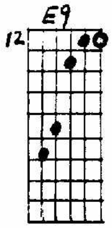
A9 4
E9 12
A9 7

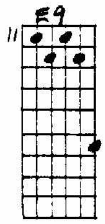


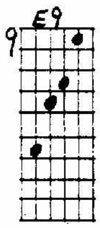


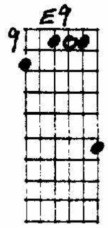


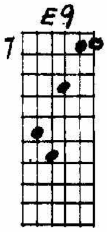


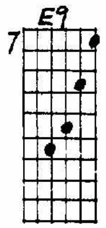


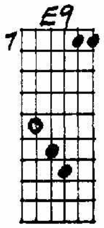


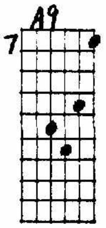






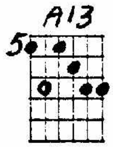


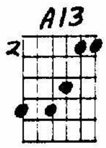


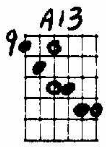


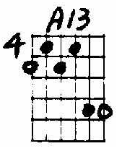
Dominant 13th (13) (135^{b}79 13)

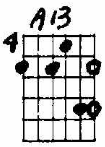
Notice that an A13 without a root would also be an Em6/9 and C$^{\#}$m7^{b}5 add 11.

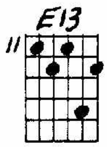


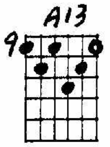


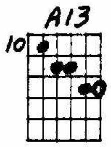


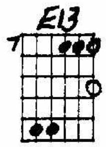


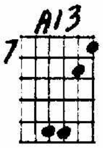


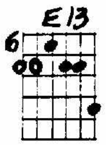


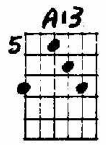


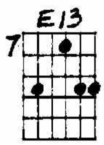


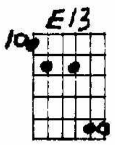


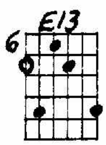


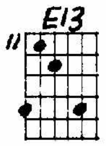


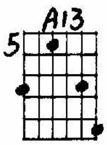


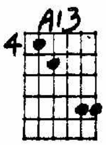


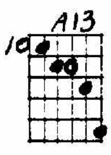


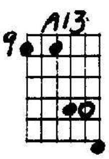


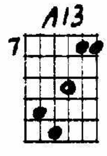


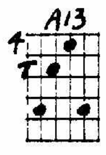


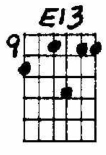


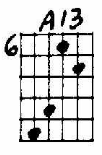


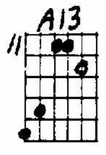


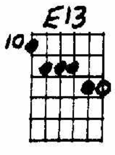


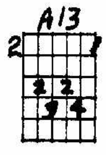


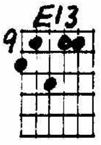


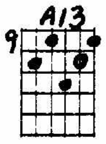


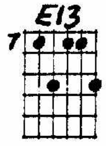


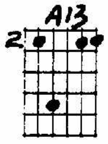


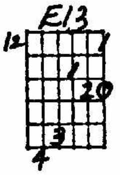
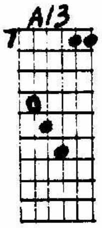


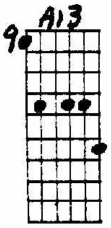


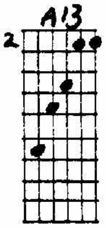




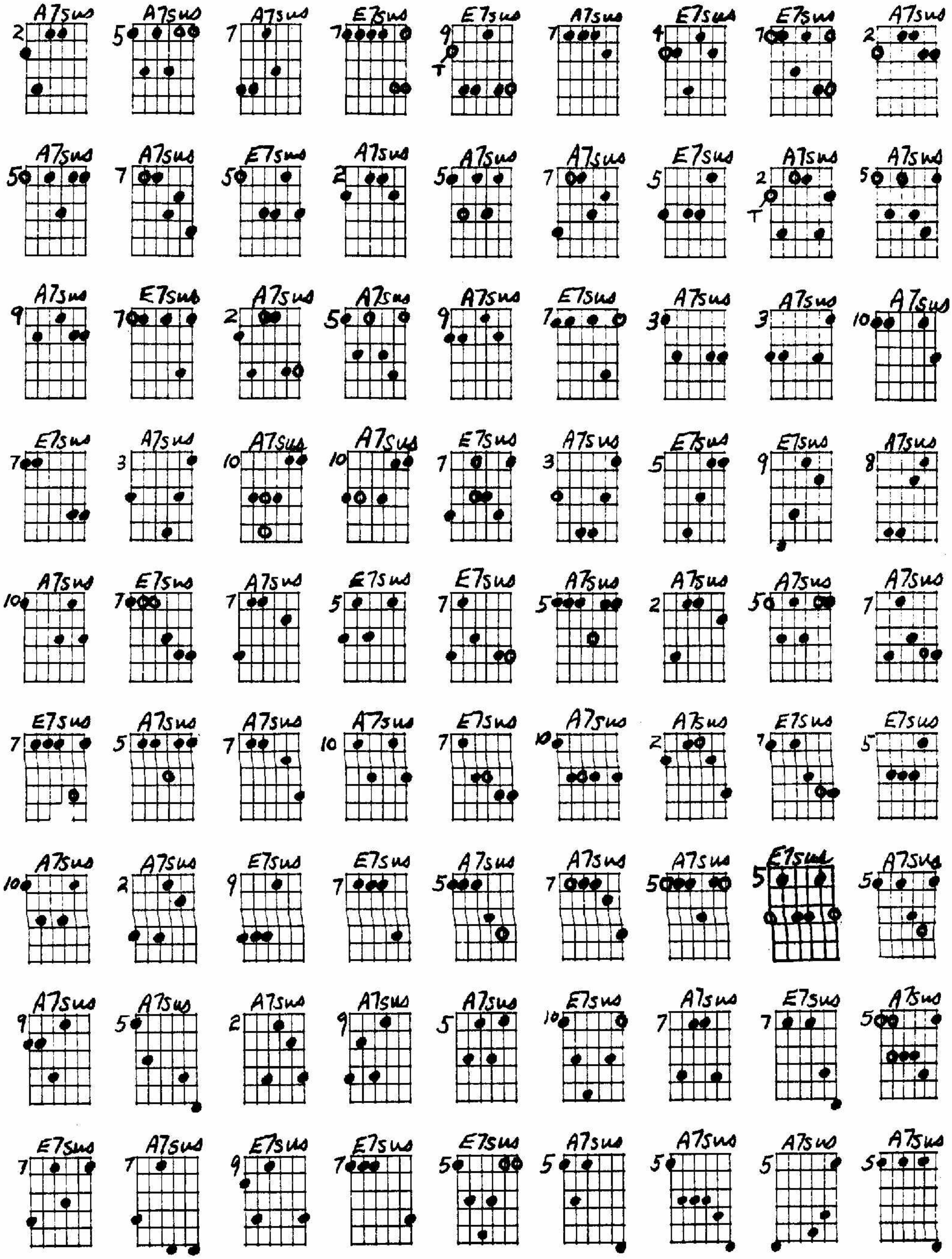


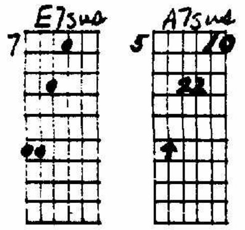

E13
12
1
1
2
3
4




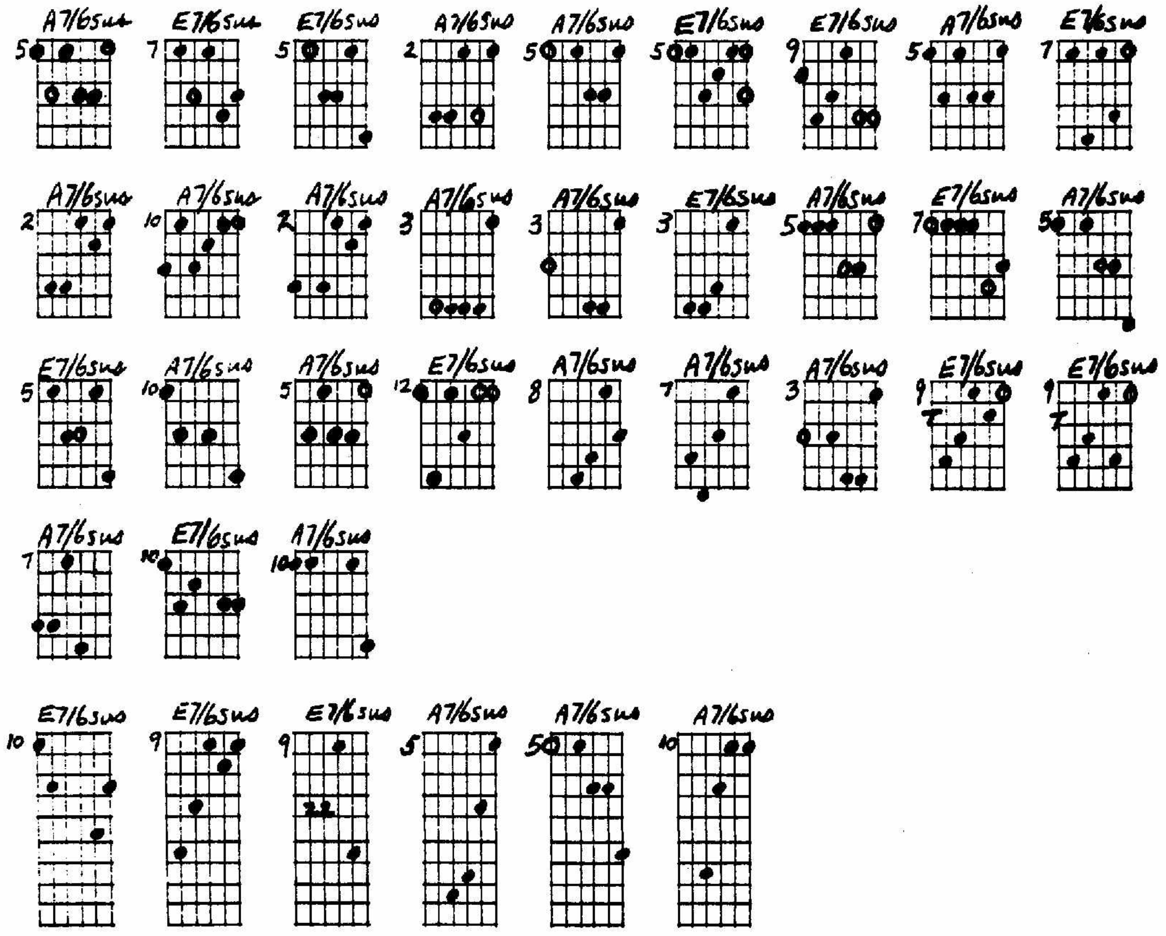


Dominant 7th Suspended Chords (7 sus.) ($145^{b}7$)

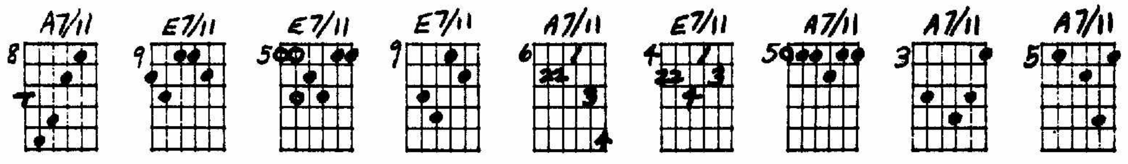

2 A7sus
5 A7sus
7 A7sus
7 E7sus
9 E7sus T
7 A7sus
4 E7sus
7 E7sus
2 A7sus
5 A7sus
7 A7sus
5 E7sus
2 A7sus
5 A7sus
7 A7sus
5 E7sus
2 A7sus T
5 A7sus
9 A7sus
7 E7sus
2 A7sus
5 A7sus
9 A7sus
7 E7sus
3 A7sus
3 A7sus
10 A7sus
7 E7sus
3 A7sus
10 A7sus
10 A7sus
7 E7sus
3 A7sus
5 E7sus
9 E7sus
8 A7sus
10 A7sus
7 E7sus
7 A7sus
5 E7sus
7 E7sus
5 A7sus
2 A7sus
5 A7sus
7 A7sus
7 E7sus
5 A7sus
7 A7sus
10 A7sus
7 E7sus
10 A7sus
2 A7sus
7 E7sus
5 E7sus
10 A7sus
2 A7sus
9 E7sus
7 E7sus
5 A7sus
7 A7sus
5 A7sus
5 E7sus
5 A7sus
9 A7sus
5 A7sus
2 A7sus
9 A7sus
5 A7sus
10 E7sus
7 A7sus
7 E7sus
5 A7sus
7 E7sus
7 A7sus
9 E7sus
7 E7sus
5 E7sus
5 A7sus
5 A7sus
5 A7sus
5 A7sus


E7sus
7
A7sus
5

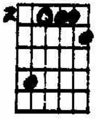
Dominant 7/6 Suspended Chords (7/6sus) (1456^{b}7)


A7/6sus
5
E7/6sus
7
E7/6sus
5
A7/6sus
2
A7/6sus
5
E7/6sus
5
E7/6sus
9
A7/6sus
5
E7/6sus
7
A7/6sus
2
A7/6sus
10
A7/6sus
2
A7/6sus
3
A7/6sus
3
E7/6sus
3
A7/6sus
5
E7/6sus
7
A7/6sus
5
E7/6sus
5
A7/6sus
10
A7/6sus
5
E7/6sus
12
A7/6sus
8
A7/6sus
7
A7/6sus
3
E7/6sus
9
E7/6sus
9
A7/6sus
7
E7/6sus
10
A7/6sus
10
E7/6sus
10
E7/6sus
9
E7/6sus
9
A7/6sus
5
A7/6sus
5
A7/6sus
10

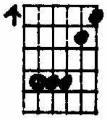
Dominant 7/11th Chords (7/11) (135^{b}7 11)


A7/11
8
E7/11
9
E7/11
5
E7/11
9
A7/11
6
E7/11
4
A7/11
5
A7/11
3
A7/11
5

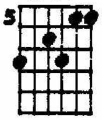
A7/11



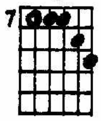
E7/11



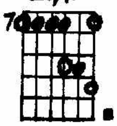
E7/11



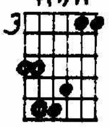
A7/11



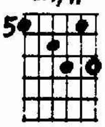
E7/11



A7/11



E7/11



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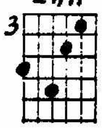

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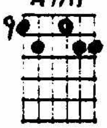

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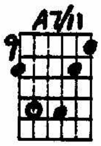

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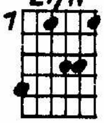

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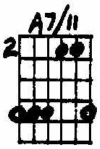

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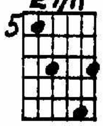

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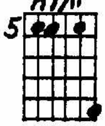

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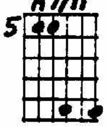

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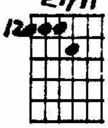

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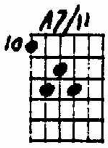

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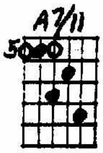

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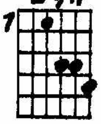

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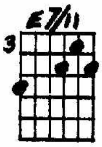

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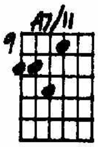

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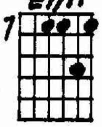

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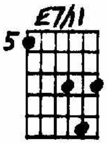
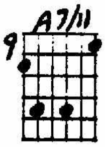


A7/11



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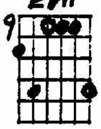

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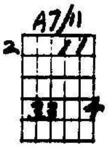

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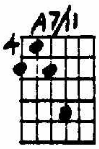

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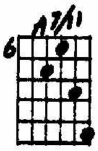

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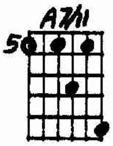

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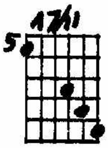

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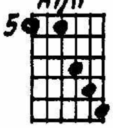

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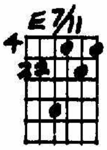

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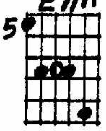

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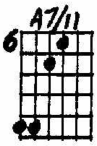

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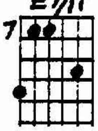

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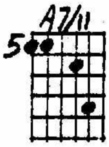

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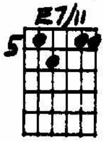

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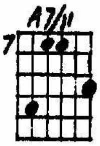

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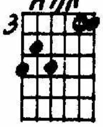

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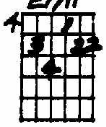
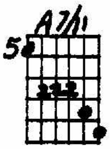


A7/11



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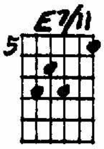

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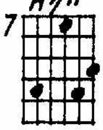

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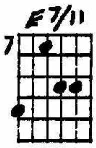

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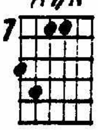

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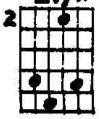

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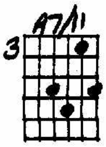

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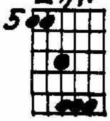

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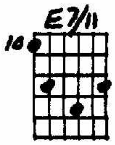

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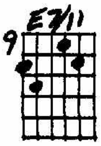

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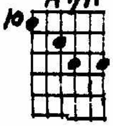

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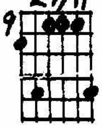

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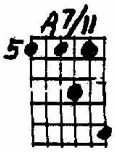

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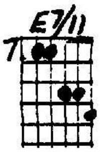

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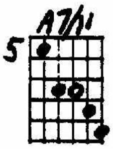

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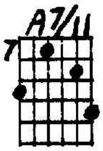

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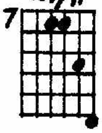

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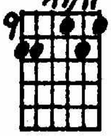

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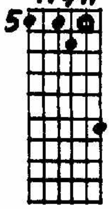

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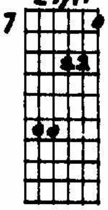

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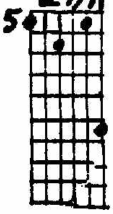
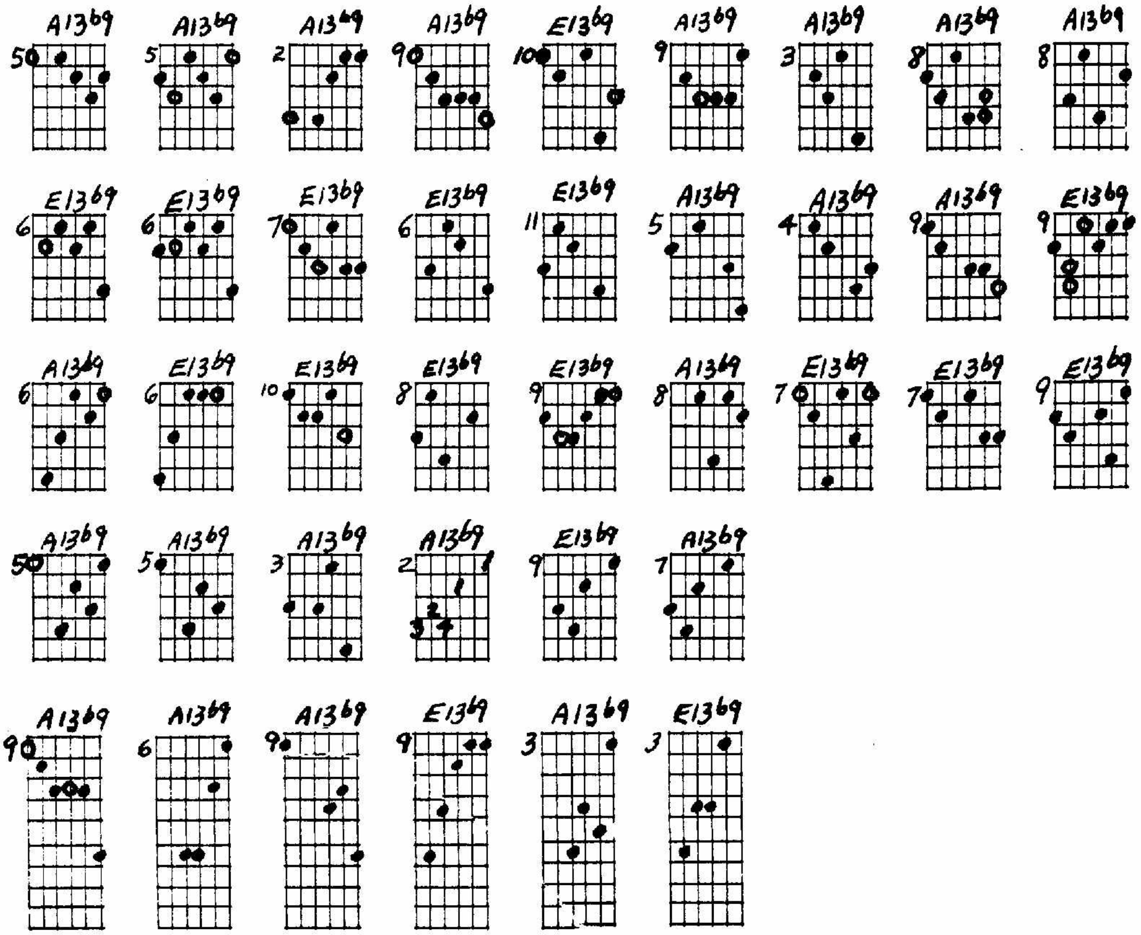
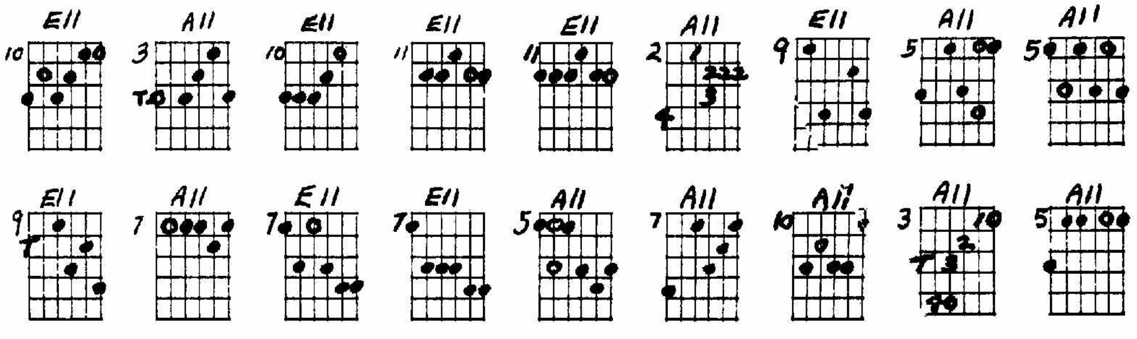


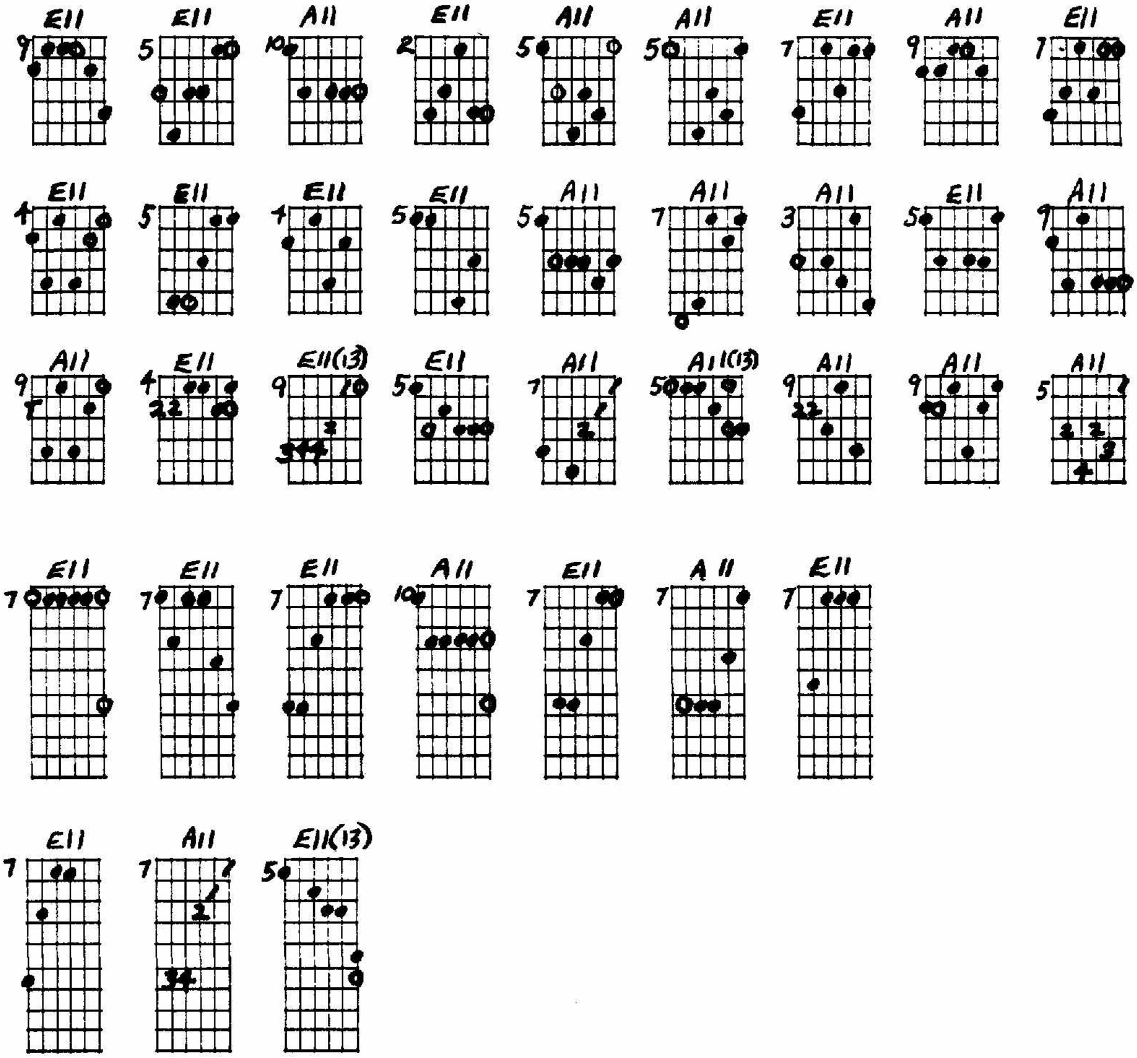
Sometimes 13^{b9} chords are played with no b7 *or* no 3rd – not both. Notice also the relationship between $E13^{b9}$ and $C\#7^{b9}$.


A13b9 5
A13b9 5
A13b9 2
A13b9 9
E13b9 10
A13b9 9
A13b9 3
A13b9 8
A13b9 8
E13b9 6
E13b9 6
E13b9 7
E13b9 6
E13b9 11
A13b9 5
A13b9 4
A13b9 9
E13b9 9
A13b9 6
E13b9 6
E13b9 10
E13b9 8
E13b9 9
A13b9 8
E13b9 7
E13b9 7
E13b9 9
A13b9 5
A13b9 5
A13b9 3
A13b9 2
1 1 2 3 4
E13b9 9
A13b9 7
A13b9 9
A13b9 6
A13b9 9
E13b9 9
A13b9 3
E13b9 3

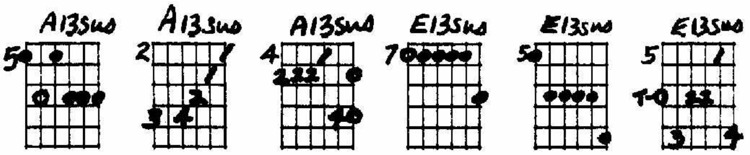
Dominant 11th (11) $(135^{b}79\ 11)$

When the 3rd is left out, this chord is also called a 9 suspended.

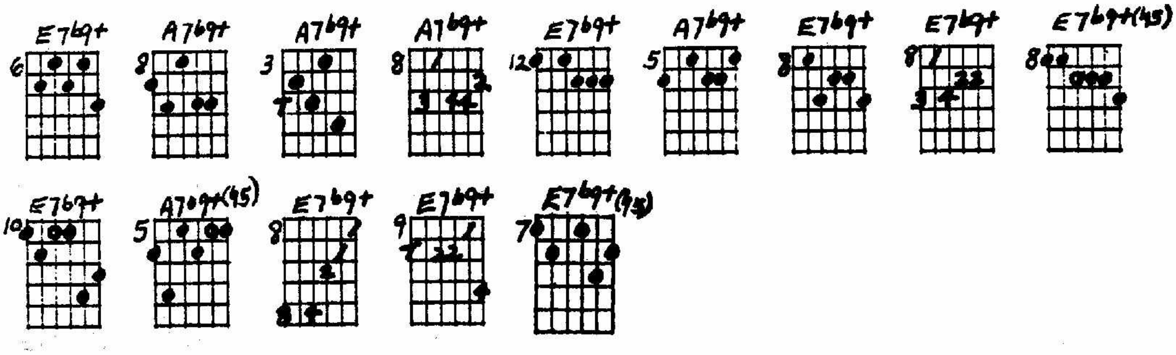

E11 10
A11 3
T
E11 10
E11 11
E11 11
A11 2
1 222 3 4
E11 9
A11 5
A11 5
E11 9
T
A11 7
E11 7
E11 7
A11 5
A11 7
A11 10
A11 3
1 2 T 3 4
A11 5


E11
E11
A11
E11
A11
A11
E11
A11
E11
E11
E11
E11
E11
A11
A11
A11
E11
A11
A11
E11
E11(13)
E11
A11
A11(13)
A11
A11
A11
E11
E11
E11
A11
E11
A11
E11
E11
A11
E11(13)

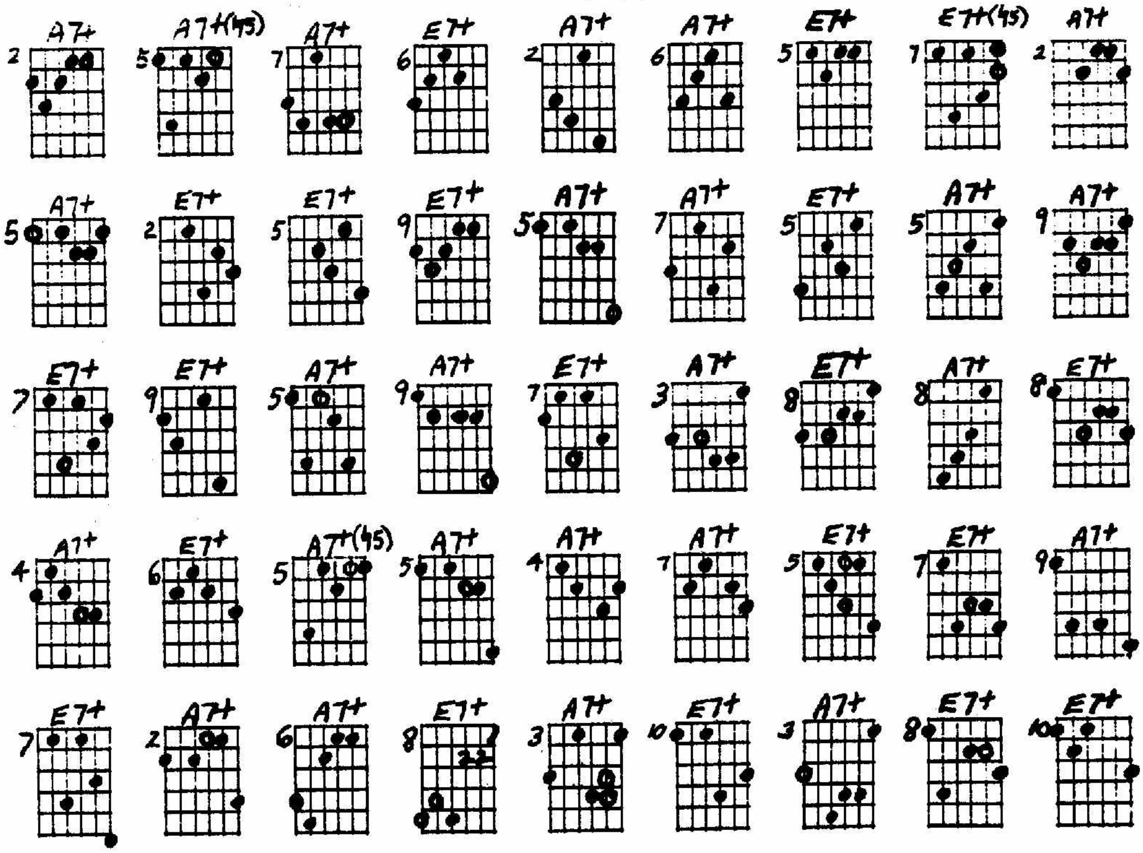
Dominant 13 Suspended (13sus) (145^{b}79 13)

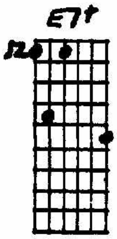

A13sus
A13sus
A13sus
E13sus
E13sus
E13sus

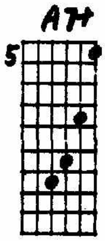
Dominant 7^{b}9$^{\#}$5 Chords (7^{b}9+) (13$^{\#}$5^{b}7^{b}9)

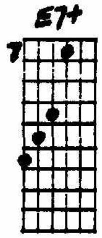

6 E7b9+
8 A7b9+
3 A7b9+
8 A7b9+
12 E7b9+
5 A7b9+
8 E7b9+
8 E7b9+
8 E7b9+(#5)
10 E7b9+
5 A7b9+(#5)
8 E7b9+
9 E7b9+
7 E7b9+(#5)

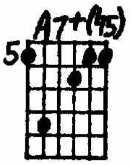
Dominant 7$^{\#}$5 Chords (7+) (13$^{\#}$5^{b}7)

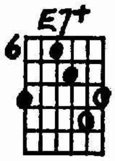

2 A7+
5 A7+(#5)
7 A7+
6 E7+
2 A7+
6 A7+
5 E7+
7 E7+(#5)
2 A7+
5 A7+
2 E7+
5 E7+
9 E7+
5 A7+
7 A7+
5 E7+
5 A7+
9 A7+
7 E7+
9 E7+
5 A7+
9 A7+
7 E7+
3 A7+
8 E7+
8 A7+
8 E7+
4 A7+
6 E7+
5 A7+(#5)
5 A7+
4 A7+
7 A7+
5 E7+
7 E7+
9 A7+
7 E7+
2 A7+
6 A7+
8 E7+
3 A7+
10 E7+
3 A7+
8 E7+
10 E7+

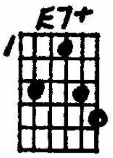






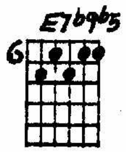


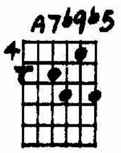


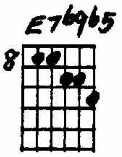


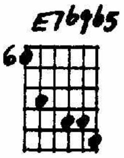
Dominant $7^{b}9^{b}5$ Chords ($7^{b}9^{b}5$) ($13^{b}5^{b}7^{b}9$)

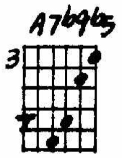
$7^{b}9^{b}5$ chords without roots are the same as 7th chords whose root is a $^{b}5$ higher, like E$7^{b}9^{b}5$ without root = B^{b}7. So only $7^{b}9^{b}5$ chords *with* roots will be listed here.

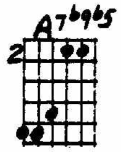


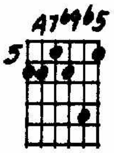


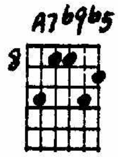


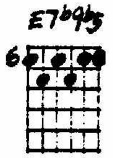


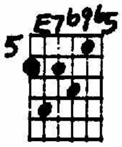


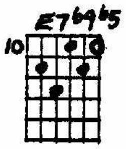


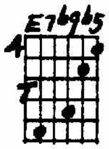


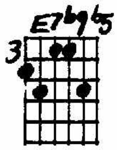


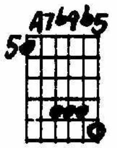


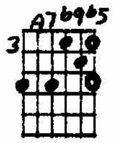


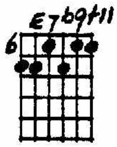






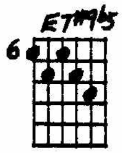


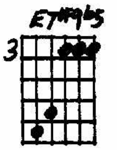


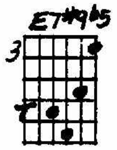


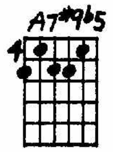
Dominant $7^{\#}9^{b}5$ Chords ($7^{\#}9^{b}5$) ($13^{b}5^{b}7^{\#}9$)

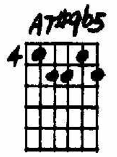
The $7^{\#}9^{b}5$ chords are the same as 7/$6^{b}5$ chords whose roots are a $^{b}5$th higher. Also notice that if the 3rd is left out of the $7^{\#}9^{b}5$ chord, the resulting chord will be the same as a m6 chord whose root is 3 frets higher, a 9th chord (with no root) whose root will be 2 whole steps lower, and also a m$7^{b}5$ chord with the same root. Example: E$7^{\#}9^{b}5$(no 3rd) = Gm6 = C9 = Em$7^{b}5$.

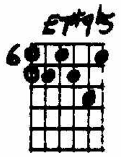


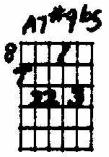


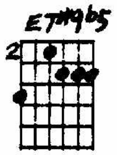


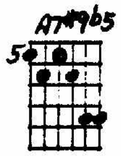


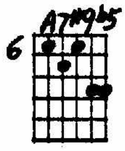


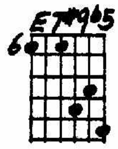


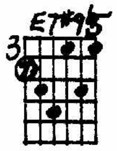


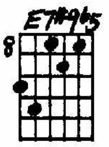


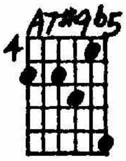




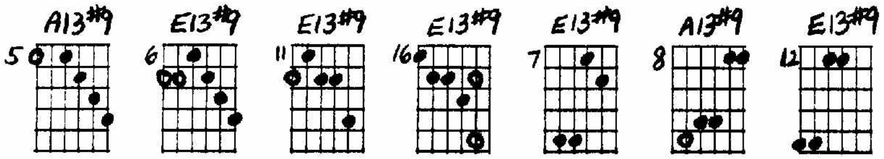




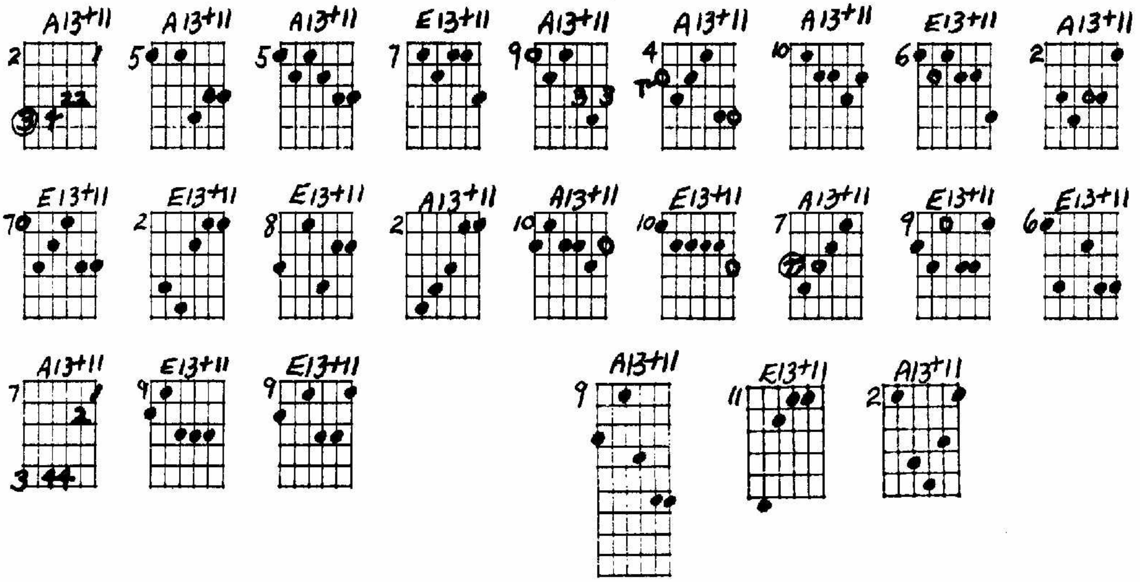




Dominant 13#9 Chords (13#9) (135^{b}7#9 13)

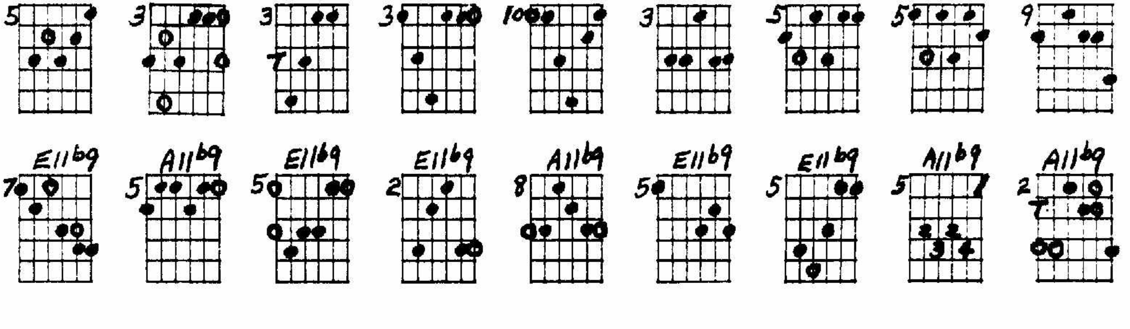

A13#9 5
E13#9 6
E13#9 11
E13#9 16
E13#9 7
A13#9 8
E13#9 12

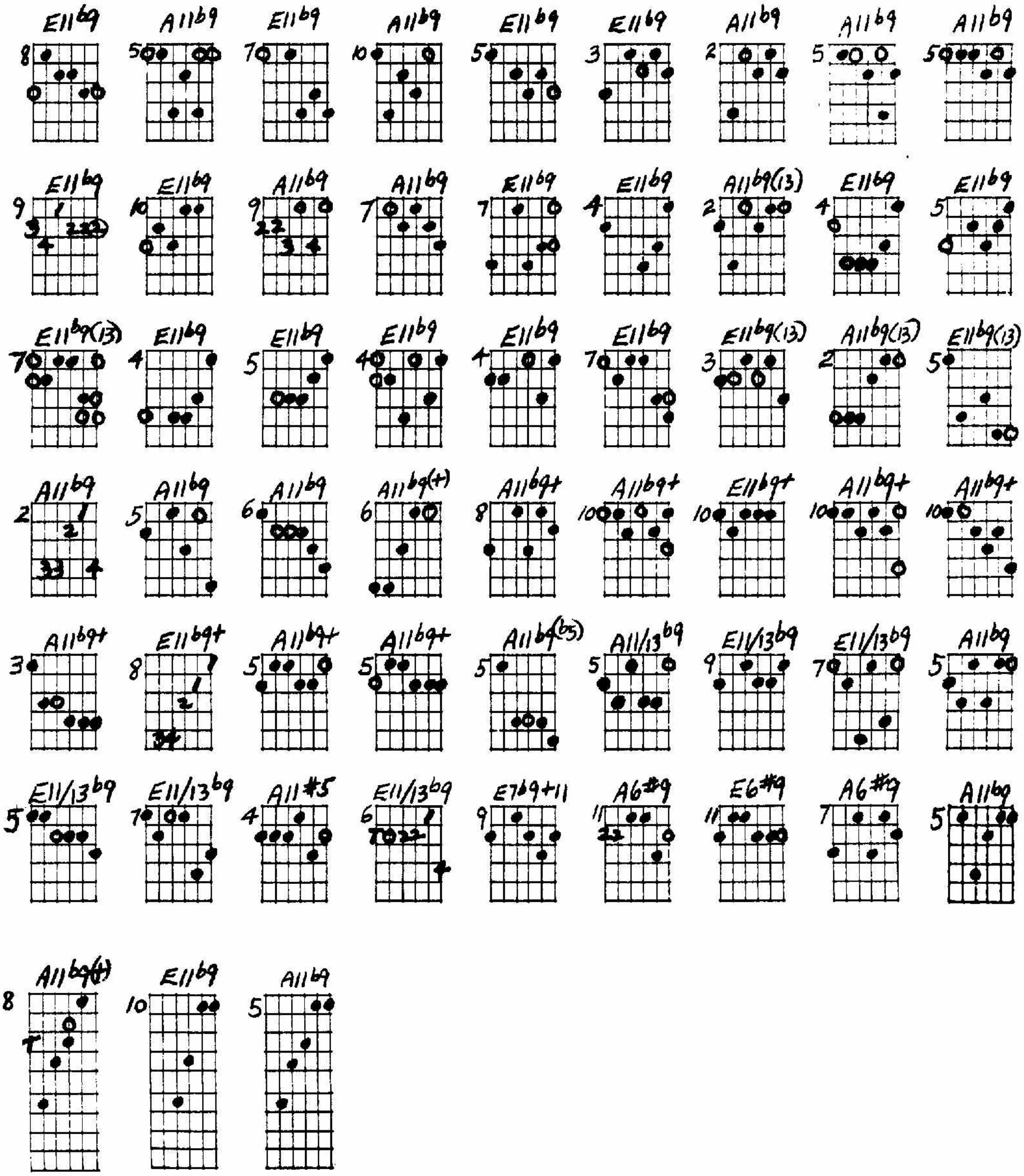
Dominant 13+11 Chords (13+11) (135^{b}79+11 13)


A13+11 2
A13+11 5
A13+11 5
E13+11 7
A13+11 9
A13+11 4
A13+11 10
E13+11 6
A13+11 2
E13+11 7
E13+11 2
E13+11 8
A13+11 2
A13+11 10
E13+11 10
A13+11 7
E13+11 9
E13+11 6
A13+11 7
E13+11 9
E13+11 9
A13+11 9
E13+11 11
A13+11 2

Dominant 11^{b}9 Chords (11^{b}9) (135^{b}7^{b}9 11) and Other Strange Chords

Notice that A11^{b}9 with no 3rd = Gm6/9 = C13 (no root). A11^{b}9 with no 3rd or 5th - Gm add 9. A11^{b}9 with no 3rd or root - Gm6, C9 (no root) and Em7^{b}5. Notice that A11^{b}9 (no root) moved up 3 frets = A7^{b}9+(^{b}5). Also notice the relationship between A13+11 (no 3rd) and Em~~7~~/9 and Em~~7~~/9/11.


E11b9 5
A11b9 3
A11b9 3
A11b9 3
A11b9 10
A11b9 3
A11b9 5
A11b9 5
E11b9 9
E11b9 7
A11b9 5
E11b9 5
E11b9 2
A11b9 8
E11b9 5
E11b9 5
A11b9 5
A11b9 2

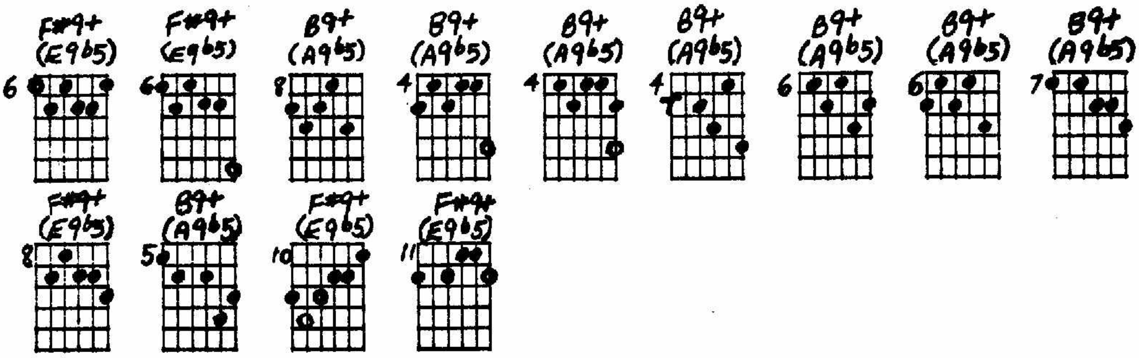

E11b9 8
A11b9 5
E11b9 7
A11b9 10
E11b9 5
E11b9 3
A11b9 2
A11b9 5
A11b9 5
E11b9 9
E11b9 10
A11b9 9
A11b9 7
E11b9 7
E11b9 4
A11b9(13) 2
E11b9 4
E11b9 5
E11b9(13) 7
E11b9 4
E11b9 5
E11b9 4
E11b9 4
E11b9 7
E11b9(13) 3
A11b9(13) 2
E11b9(13) 5
A11b9 2
A11b9 5
A11b9 6
A11b9(+) 6
A11b9+ 8
A11b9+ 10
E11b9+ 10
A11b9+ 10
A11b9+ 10
A11b9+ 3
E11b9+ 8
A11b9+ 5
A11b9+ 5
A11b9(b5) 5
A11/13b9 5
E11/13b9 9
E11/13b9 7
A11b9 5
E11/13b9 5
E11/13b9 7
A11#5 4
E11/13b9 6
E7b9+11 9
A6#9 11
E6#9 11
A6#9 7
A11b9 5
A11b9(+) 8
E11b9 10
A11b9 5

Dominant 9th $^{b}5$th Chords ($9^{b}5$) ($13^{b}5^{b}79$)

$9^{b}5$ chords *without roots* are the same as $7^{\#}5$ chords chords whose roots are a $^{b}5$ higher. Example: $E9^{b}5$(no root) = $B^{b}7^{\#}5$ ($B^{b}7+$). When the root is added to the $9^{b}5$ chord, it is slightly different. Since the $7^{\#}5$s are already listed, only $9^{b}5$s with roots will be listed here. This $9^{b}5$ chord with the root is also a $7^{\#}5^{b}5$ whose root is a $^{b}5$th higher than the root of the $9^{b}5$. Example: $E9^{b}5 = B^{b}7^{\#}5^{b}5$; also important is the fact that $9^{b}5$ chords = $9^{\#}5$ chords whose roots are a whole step higher. Example: $D9^{b}5 = E9^{\#}5$.

Dominant $9^{\#}5$th Chords ($9^{\#}5$ or 9+) ($13^{\#}5^{b}79$) and Dominant $7^{\#}5^{b}5$ Chords ($7^{\#}5^{b}5$)

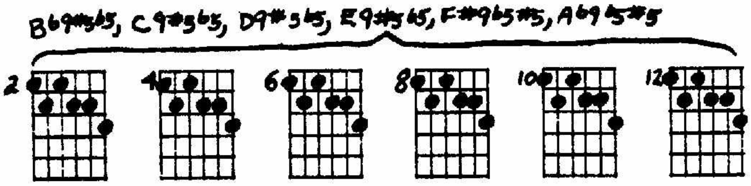
Reviewing the synonyms, we can state the following: $D9^{\#}5$(no root) = $A^{b}9^{\#}5$(no root) = $C7^{b}5$ = $G^{b}7^{b}5$. As said before, if the $9^{\#}5$ includes the root, it is the same as a $9^{b}5$. Example: $D9^{b}5$ = $E9^{\#}5$. Also $9^{\#}5$ chords are the same as $7^{\#}5^{b}5$ chords whose roots are 2 whole steps higher. Example: $E9^{\#}5$ = $A^{b}7^{\#}5^{b}5$.


F#9+ (E9b5)
6
F#9+ (E9b5)
6
B9+ (A9b5)
8
B9+ (A9b5)
4
B9+ (A9b5)
4
B9+ (A9b5)
4
B9+ (A9b5)
6
B9+ (A9b5)
6
B9+ (A9b5)
7
F#9+ (E9b5)
8
B9+ (A9b5)
5
F#9+ (E9b5)
10
F#9+ (E9b5)
11

Dominant $9^{\#}5^{b}5$ Chords ($9^{\#}5^{b}5$) ($13^{\#}5^{b}5^{b}79$)

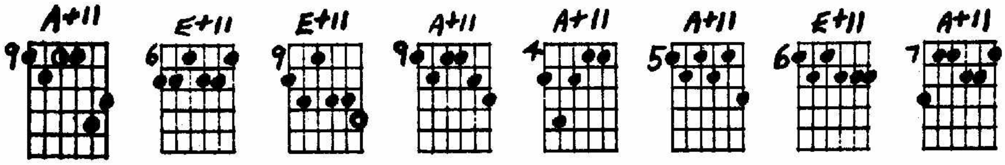
There seems to be only one inversion of this amazing chord — that is, one inversion that contains *all* the notes, and is easily playable on the guitar. This chord has 6 names and repeats itself every 2 frets,- however, it is not a very practical chord, and is given here to satisfy the curious more than anything else. If you leave out any note in this chord, you will have an inversion of the $9^{b}5$ ($9^{\#}5$).

$9^{b}5$'s have a less muddy sound and are more easily used, so you needn't bother with this $9^{\#}5^{b}5$ — anyway, many chords can be moved in 2 fret intervals even though they don't actually repeat themselves, as you will see in a later section.


Bb9#5b5, C9#5b5, D9#5b5, E9#5b5, F#9b5#5, Ab9b5#5
2
4
6
8
10
12

Augmented 11th Chords (+11) ($135^{b}79$+11)

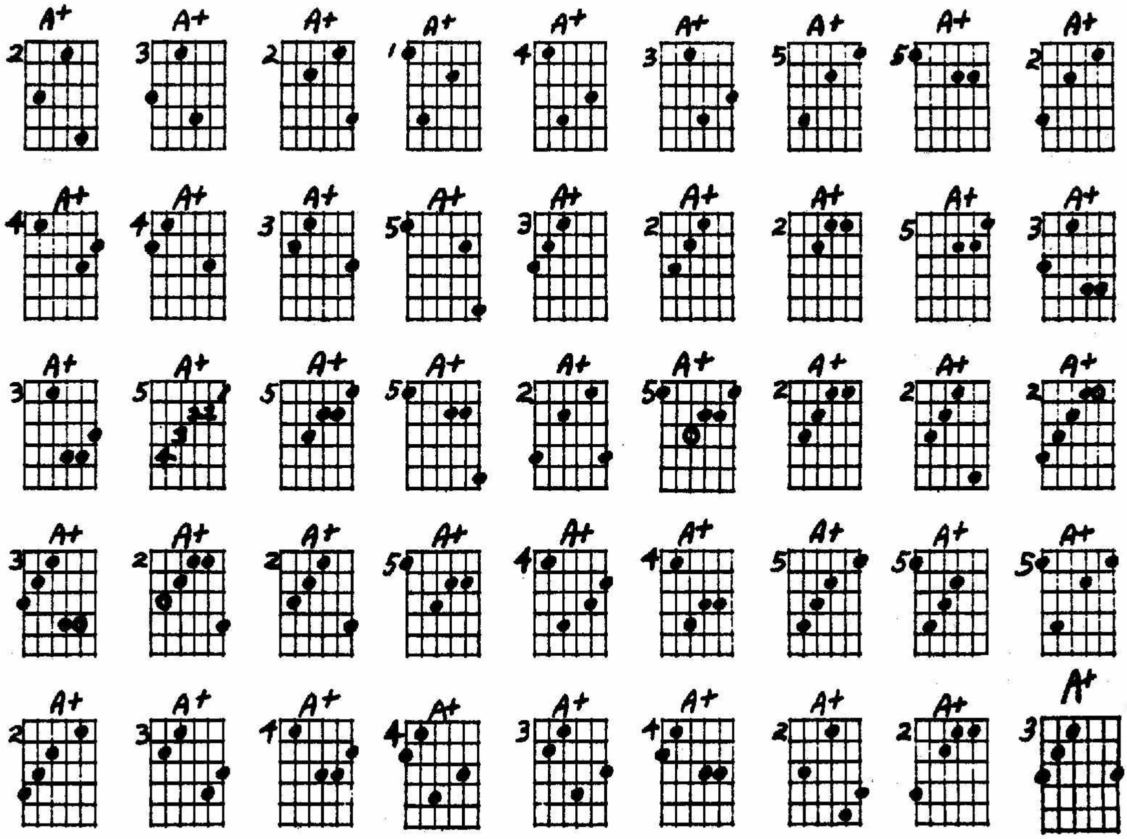
This chord is very similar to the $9^{b}5$ chord. The only difference is that the 5th *and* the +11th ($^{b}5$th) are in the +11 chord while just the +11th ($^{b}5$th) is in the $9^{b}5$. Usually, the $9^{b}5$ is played for the +11, and since they ($9^{b}5$s) are written elsewhere, only +11 chords that have *both* the 5th *and* +11th will be listed here.


A+11
9
E+11
6
E+11
9
A+11
9
A+11
4
A+11
5
E+11
6
A+11
7

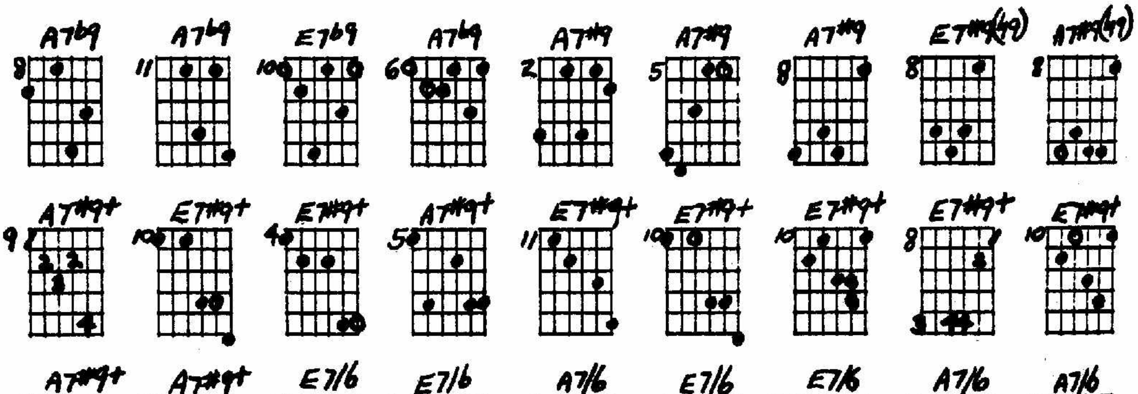
Augmented Chords (+) (13#5)

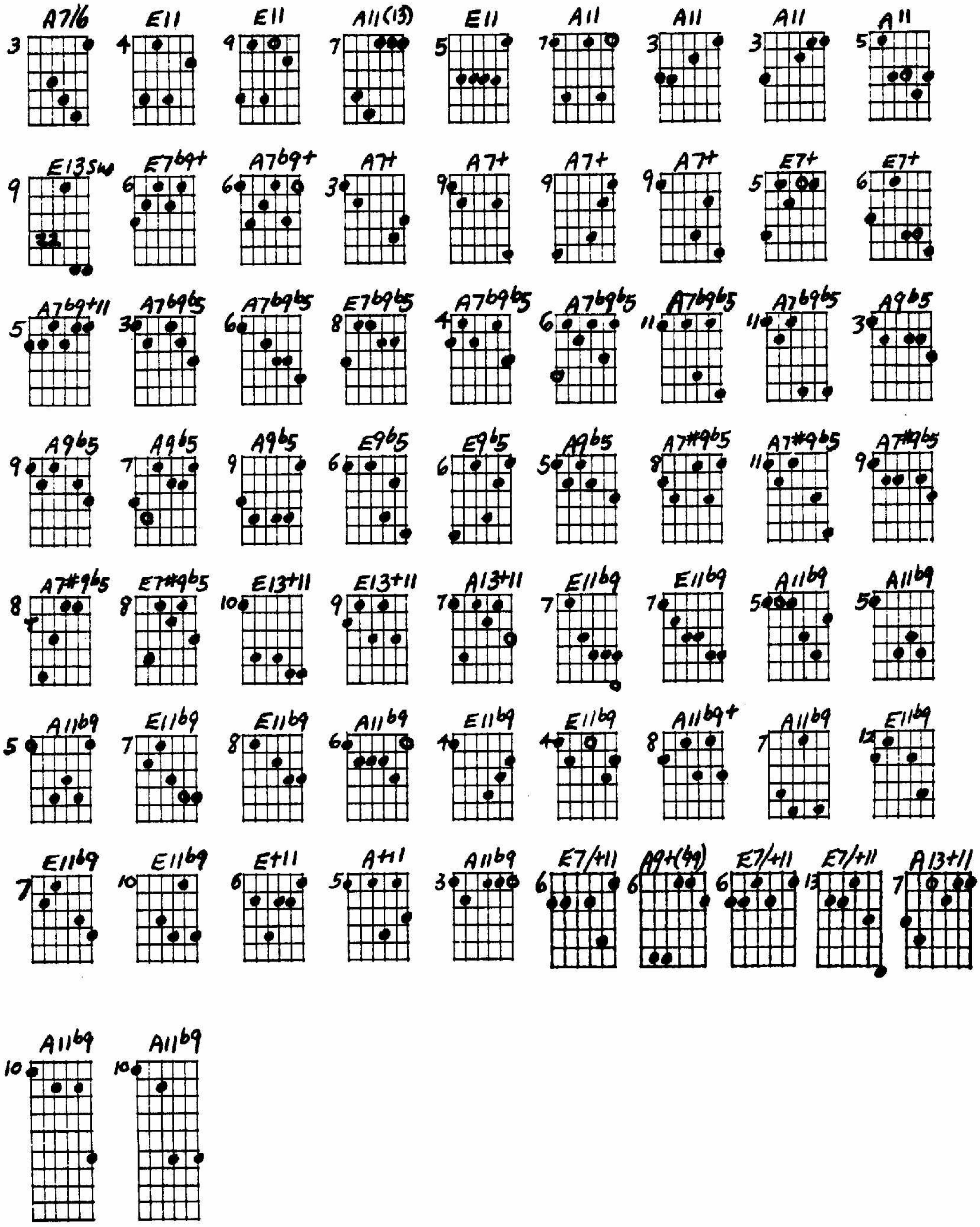
Each chord has 3 names. Augmented chords repeat every 4 frets. See page 64

(A+ = C#+ = F+)


A+ 2
A+ 3
A+ 2
A+ 1
A+ 4
A+ 3
A+ 5
A+ 5
A+ 2
A+ 4
A+ 4
A+ 3
A+ 5
A+ 3
A+ 2
A+ 2
A+ 5
A+ 3
A+ 3
A+ 5
A+ 5
A+ 5
A+ 2
A+ 5
A+ 2
A+ 2
A+ 2
A+ 3
A+ 2
A+ 2
A+ 5
A+ 4
A+ 4
A+ 5
A+ 5
A+ 5
A+ 2
A+ 3
A+ 4
A+ 4
A+ 3
A+ 4
A+ 2
A+ 2
A+ 3

EXTRA CHORDS


A7b9 8
A7b9 11
E7b9 10
A7b9 6
A7#9 2
A7#9 5
A7#9 8
E7#9(b9) 8
A7#9(b9) 8
A7#9+ 9
E7#9+ 10
E7#9+ 4
A7#9+ 5
E7#9+ 11
E7#9+ 10
E7#9+ 10
E7#9+ 8
E7#9+ 10
A7#9+ 8
A7#9+ 9
E7/6 5
E7/6 12
A7/6 3
E7/6 3
E7/6 7
A7/6 8
A7/6 7


A7/6 3
E11 4
E11 9
A11(13) 7
E11 5
A11 7
A11 3
A11 3
A11 5
E13Sus 9
E7b9+ 6
A7b9+ 6
A7+ 3
A7+ 9
A7+ 9
A7+ 9
E7+ 5
E7+ 6
A7b9+11 5
A7b9b5 3
A7b9b5 6
E7b9b5 8
A7b9b5 4
A7b9b5 6
A7b9b5 11
A7b9b5 11
A9b5 3
A9b5 9
A9b5 7
A9b5 9
E9b5 6
E9b5 6
A9b5 5
A7#9b5 8
A7#9b5 11
A7#9b5 9
A7#9b5 8
E7#9b5 8
E13+11 10
E13+11 9
A13+11 7
E11b9 7
E11b9 7
A11b9 5
A11b9 5
A11b9 5
E11b9 7
E11b9 8
A11b9 6
E11b9 4
E11b9 4
A11b9+ 8
A11b9 7
E11b9 12
E11b9 7
E11b9 10
E+11 6
A+11 5
A11b9 3
E7/+11 6
A9+(b9) 6
E7/+11 6
E7/+11 13
A13+11 7
A11b9 10
A11b9 10

Section 9

Ear Training

One thing that is very important is learning to recognize the sounds of different kinds of chords and chord progressions. There are some good reasons for this:

1) If you learn to hear different kinds of chords, you will be able to figure out songs "by ear".
2) You will find that the improvement of your musical ear in one area will overlap into other areas. For instance, if you start to recognize the sound of nice chords when you hear them, you will also start being able to hear nice melodies or solo lines too.
3) You will actually learn to *anticipate* the place where certain chord progressions are going, and which chords will be making the trip.

One first step in ear training is to learn to tell the difference between simple major and minor triads. Practice a few minutes each day *playing many inversions* of major and minor chords, if you cannot already hear the difference between the two. In a short time, you will be able to hear this difference.

The next step is the dominant 7th chord; it definitely sounds more like the major chord than the minor, but there is that $^{b}7$ which changes it slightly. Practice as before, now comparing the 3 different sounds.

The next step is to practice also the major 7th and minor 7th chords again, comparing differences with the other chords. Notice how closely related the major and major 7th chords are, and also the minor and minor 7th chords. (Also notice that the m7 is the same as a *major* 6th whose root is 3 frets higher than the root of the m7 chord, (like Am7 = C6). You should have encountered this type of relationship in the section containing the chord synonyms.)

So now a good exercise might be to play a C major chord, then a C6 chord, then an Am chord, them an Am7 chord. Do this with many inversions, not just 1 or 2 of each. If you do not, you will probably not get a broad enough perspective on the different kinds of sounds that different inversions can make.

Now practice playing different inversions of the diminished and augmented chords. You will probably learn to hear these chords fairly rapidly, because of their unusual sound.

If you have pretty well learned the different sounds of the chords so far, you could now start trying to hear the sounds of any other chords you like. There are many unusual colors or flavors of chords listed in this book, and each has its own sound. Refer to the page on synonyms as an aid to hearing certain chords in more than one way. *Realize that every chord except the diminished, augmented, and some chords without 3rds can be thought of as either major, minor, or dominant.* When you hear a chord, you should immediately classify it as one of the 3 categories, if possible. Some chords, due to the synonyms, will sound like more than one category, so try to hear these chords in all possible ways.

The next step is hearing chord progressions. This comes mainly with experience, and being familiar with many different kinds of chord progressions. The most useful tool here is to listen to and learn how to play many different songs. This greatly develops your ear, and if you start analyzing and comparing the chord progressions in these songs, you will notice patterns that are used over and over again. Soon you will be able to hear these patterns in songs you are hearing for the 1st time, and you will recognize them instantly.

By songs, it is meant anything that has chords or implied chords. This includes classical music. There is a wealth of knowledge in this music, and as in all forms of music, there is good and not so good. *Investigate.*

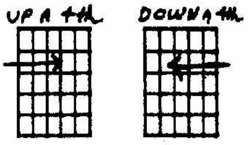
The term "implied chords" was just used. This happens when there are 2 melodies or voices together, but no chords, as for example, in the 2 Part Inventions of Johann Sebastian Bach. The 2 melodies seem to suggest a chord; listening to these inventions should point this out.

To sum up this section, *experience is the best teacher, but a thorough study and mental categorization of sounds is essential to understanding and hearing chords and chord progressions.*

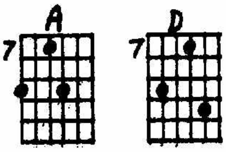
Section 10

Moving Chords a 4th

Any chord that does not lie on all 6 strings can theoretically be moved either up or down a 4th (or sometimes both) by moving over each note in the chord 1 string at the same fret. (The word theoretically is used because some of the chords arrived at are too hard to finger).

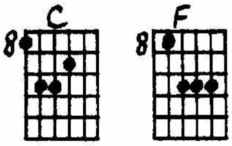


Example:

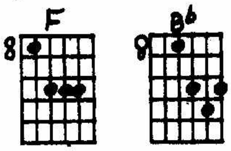


A can be moved up a 4th to D and D can be moved down a 4th to A on the same fret by moving the notes over 1 string in the directions of the arrows However, notice that there is a discrepancy between the 2nd and 3rd strings. The following rule should explain this:

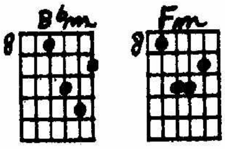
When moving a chord *up a 4th* in the above method, any note that lands on the second string must be moved up 1 fret; All other notes stay on the same fret. When moving a chord *down a 4th,* any note that lands on the third string must be lowered 1 fret. All other notes stay on the same fret. Examples:



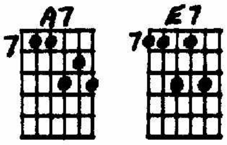
up a 4th



up a 4th



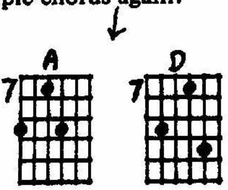
down a 4th



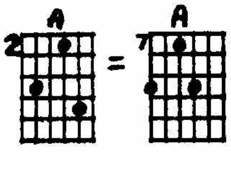
down a 4th

Incidentally, by moving a chord *down a 4th*, you arrive at the same letter name as if you were to move a chord *up a 5th.*

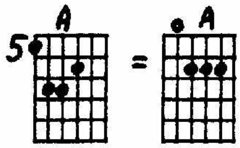
One of the most important uses of this section is that you learn how to play the same chord with the same voicing in more than one place on the neck. Look at the 1st example chords again:

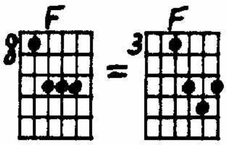


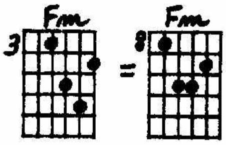
Notice that if you lower the D chord 5 frets (to the 2nd fret) you will have an A chord which sounds exactly like the A chord on the 7th fret. In other words:

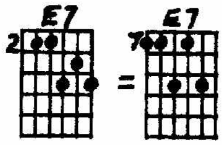


Now using the same logic with the other examples you will notice the following:









Experiment with this principle using other chords. It will really help to give you insight into the nature of the guitar.

Section 11

Chord Substitutions and General Information

These are just guidelines or suggestions (not rigid rules) for some of the most common substitutions.

I. For a basic major, minor, or dominant 7th chord, any extension may theoretically be substituted. The word theoretically is used because, as said before, you must experiment and you will find that certain extensions sound better in certain places than others. Example: a Cm6 might sound better than Cm7 in place of a Cm in a certain song.

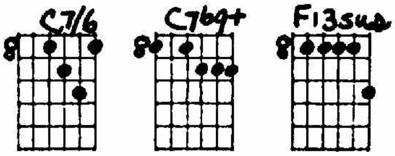
II. For a dominant 7th chord, you may play a m7 *type* chord whose root is a 5th higher than the root of the dominant chord, but you do not *only* play this m7 type chord; you play it for part of the duration of the dominant chord and *then* play the dominant chord (or extension). Example: for one measure of C7 (4 beats normally), you could use Gm7 for 2 beats, and then C7 for 2 beats; or Gm7 for 3 beats and then C7 for 1 beat, etc.

III. Dominant chords with altered tones (remember this means ^{b}5th, $^{\#}$5th, ^{b}9th, $^{\#}$9th) can be used effectively for dominant chords when the *next* chord is: 1-one whose root is a 4th higher, 2-one whose root is a ½ step lower, and 3-a minor type chord with the same root. However, the 7$^{\#}$9 chord can also be used as a direct replacement for the 7th chord in other cases too, when a "bluesy" sound is desired.

One important point is that you couldn't always *replace* a I7 at the beginning of a song with an altered chord (except for a 7$^{\#}$9); you might first play the I7 (or extension) and *then* you could play the altered chord. Now for some examples of the 3 cases listed. Suppose the basic chords at the beginning of a song were:

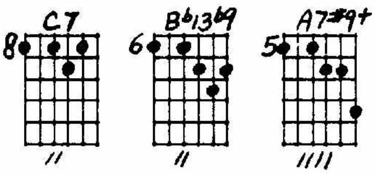
1) C7 F7 in the key of C you might play
//// //// ← NUMBER OF BEATS

Notice that the F7 is a 4th higher than the C7.



2) Suppose, in part of a song, you had the following basic chords to work with – C7 B^{b}7 A7 you might play:
// // ////

Notice that A7 is ½ step lower than B^{b}7.

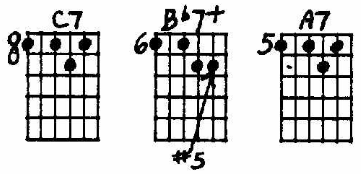


In this progression it is most likely that the next chord will be D7 or Dm7, so this chord may be altered since D is a 4th higher than A, (this is the same logic as the previous example).

The most critical factor in an altered tone is often its *top* note (highest pitch).

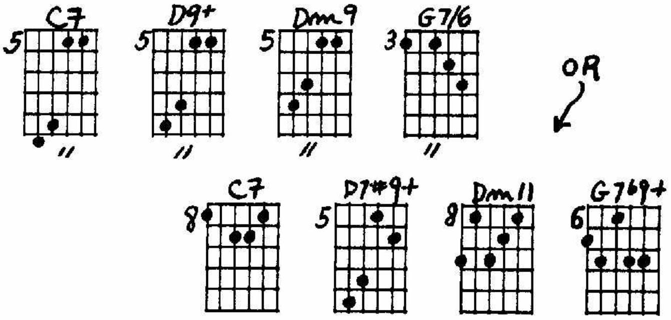
Example:

Notice how the B^{b}7$^\#$5 sounds out of place here. If the $^\#$5 tone were replaced with a 5th, ^{b}5th or 6th tone, the chord would sound good.



3) Suppose in a song you encountered the following chords: C7 D7 Dm7 G7.

Notice that the m7 chord has the same root as the dominant chord. You might play the following chords instead:



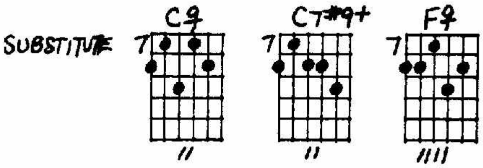
(The G7 may be altered because it sounds as if it is going back to C which is a 4th higher). The D7$^\#$9+ chord brings up an important point; suppose you were playing these chords in a song backing up a singer; they would not necessarily work then, because the singer's melody might conflict with the chords. In a case like this, you must pay special attention to the TOP note in each chord.

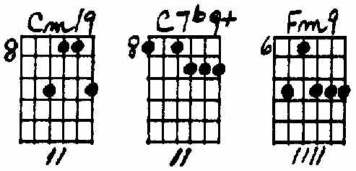
The D7$^\#$9+ chord in this example has the $^\#$9 as its top note; a very common melody note is the 3rd of a chord. If the basic chord were D7 and the melody was F$^\#$ (the 3rd of the chord), you could not use the D7$^\#$9$^\#$5 chord because of the F note on top. So if you are playing substitute chords in a song, it would be wise if you were thoroughly acquainted with the melody. If you are playing chords behind an improvising soloist, you need not worry, if he is competent, as he will be able to hear your chords as you hit them, and play his solo accordingly; if he is not too experienced in soloing, it may help to get together beforehand on what you might do.

IV. Whenever a major or minor type chord is followed by a major, minor, or dominant type chord whose root is a 4th higher, you may divide the duration of the 1st chord in ½ and play a dominant chord with the same root for the 2nd ½ of the allotted time.

Examples: 1) BASIC: C F 2) BASIC: Cm Fm

//// ////

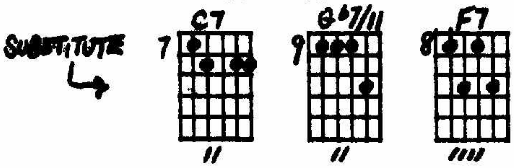




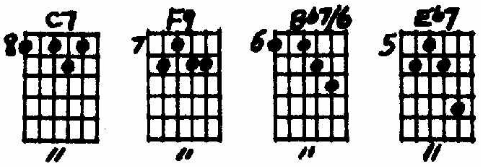
V. For a dominant type chord, you may play another dominant type chord whose root is a ^{b}5th higher. Once again this is usually done when the chord AFTER the dominant chord is either: 1-one whose root is a 4th higher, 2-one whose root is ½ step lower, 3-a minor type chord whose root is the same as the dominant chord. Once again, be careful with altered tones.

Examples:

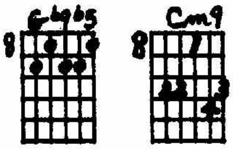
1) BASIC: C7 F7
//// ////



2) BASIC: C7 B7 B^{b}7 A7
// // // //

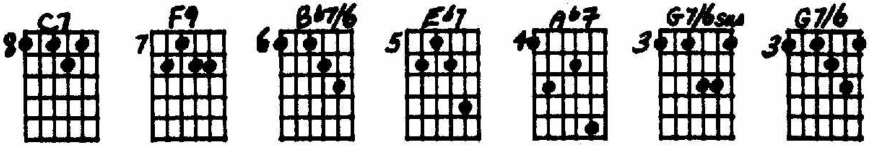


3-BASIC: C7 Cm7



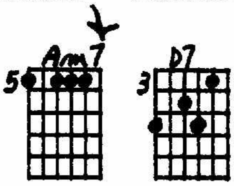
Sometimes a major type chord can be substituted instead of a dominant chord along the lines of this ^{b}5th principle. If example 2- were continued, it could sound like this:

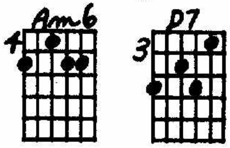
BASIC: C7 B7 Bb7 A7 D7 G-7
// // // // // ////



Of interest is the fact that all dominant chords a ^{b}5th apart are related. Example: C7^{b}5 = G^{b}7^{b}5; C9^{b}5 = G^{b}7^{b}5$^{\#}$5; C7$^{\#}$5 = G^{b}9^{b}5, etc. Also of interest is the fact that chords a ^{b}5th apart are each the ^{b}5th of each other. Example: A dominant chord a ^{b}5th higher than G^{b}7 is C7; a dominant chord a ^{b}5th higher than C7 is G^{b}7.

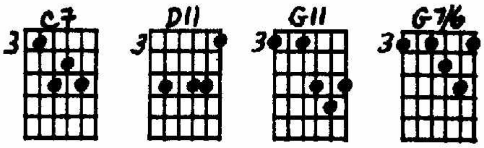
VI. Minor 6th type chords usually should not be used for a minor chord that is followed by a dominant chord a 4th higher, because the m6 type chord will sound too much like the next dominant chord. Example: BASIC: Am D7. If you were to play the following there would not be as much contrast as but it is really a matter of taste, so let your ears lead the way.





VII. The only altered minor chord that is *widely* used is the m7^{b}5 type. It is generally used in place of the m7 type, but you wouldn't use it as a tonic chord to start a song. The m7$^{\#}$5 is generally not thought of as itself, but rather its synonyms, the add 9, m7/11, and 11th chords.

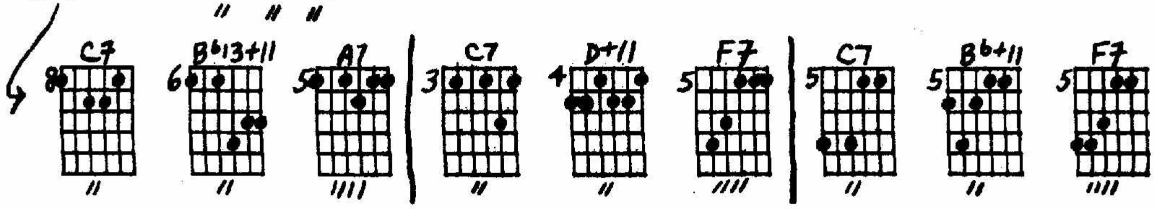
VIII. The dominant 11th chords (especially with no 3rd) are some of the prettiest chords when used properly. They generally replace the 7th chord, but almost always as a V7 function (see section 12 on the cycle) and rarely as a tonic. You will find examples of their useage in the rest of the book. However, they may also replace m7 type chords a 5th higher (Remember, they equal the m7/11 due to synonyms). Examples: BASIC: C Am Dm G7. Due to substitutions, this progression could become C7 Am7 Dm7 G7, which could then become C7 D11 G11 G7/6. The D11 chord is not really that much better than Am7, but the G11 really helps



in place of Dm7. You wouldn't use this principle in place of a TONIC minor chord at the beginning of a song. In other words, in the key of Am, if you were to start on a D11 for an Am, this would not sound right to most ears. Notice that the D11 is also an Am7/11 (no root) with the 11th in the bass, and likewise, the G11 is a Dm7/11 (no root) with the 11th in the bass. By the way, if you do not leave out the 3rd in an 11th chord, the root and 5th both may be omitted.

IX. Augmented 11th type chords can be used in place of dominant chords that are followed by a chord a 4th higher (just like other altered dominants). One trick, though, is to use +11 chords whose roots are 1-a ᵇ5th higher, 2-whole step higher, 3-whole step lower, (Note: If you try a +11 chord a whole step higher and it doesn't sound too good, try one 3 frets higher. Example: for A7 try B13+11 and C13+11. Sometimes, neither will sound good, as well as the +11 a whole step lower, and a ᵇ5th higher but with experience you will learn where to put in the +11 chords) than the root of the dominant chord they replace. Examples: For these basic chords you could

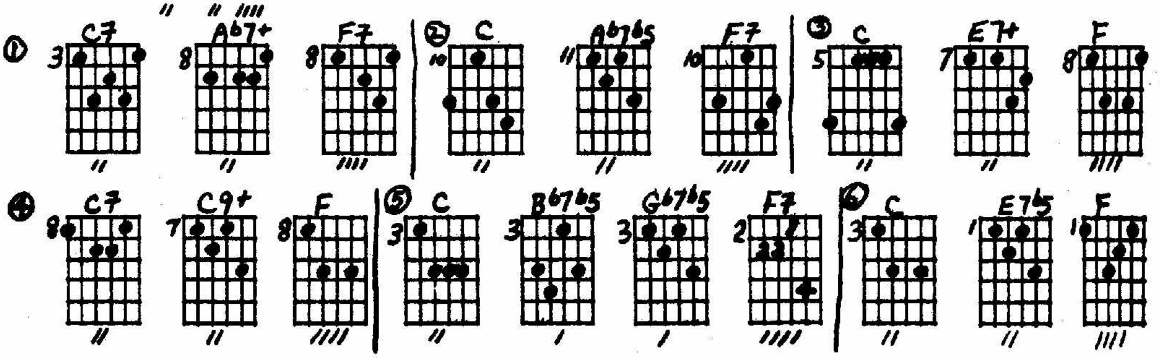
play: 1-BASIC: C E7 A7 2-BASIC: C7 F 3-BASIC: C7 F



IMPORTANT: Once again, as with other altered dominant chords, the +11 does not assume a tonic function; that is, you wouldn't REPLACE a I7 at the beginning of a song with it. You might play the I7 and *then* the +11.

You may also use +11 chords in place of a dominant chord when the chord after the dominant chord is a minor type of the same root; however, in a case such as this, use mainly the ᵇ5th higher +11 chord. Example: Basic C7 Cm7 could be Gᵇ+11 Cm9.

Notice that if the 5th is omitted from the +11 chord, you have a 9ᵇ5 chord. It is actually more common to play a 9ᵇ5 than a +11. Notice also, from the synonyms, that C9ᵇ5 (no root) = Gᵇ7+. Therefore, since you may play Gᵇ+11, Bᵇ+11, and D+11 for C7 as illustrated in the above examples, you could also have played C7+, E7+, and Aᵇ7+. Even though these are just fragments of the +11, IN THE RIGHT INVERSIONS they could be very effective. Also notice that D7ᵇ5 is a fragment of the D+11 chord; you could also use it. Now look at the synonyms for D7ᵇ5 (Aᵇ7ᵇ5, E9+(no root), and Bᵇ9+(no root). Since you may use D+11, Bᵇ+11, and Gᵇ+11 for C7, as illustrated, you could now theoretically also use D7ᵇ5, Aᵇ7ᵇ5, E9+(no root), Bᵇ9+(no root), Bᵇ7ᵇ5, E7ᵇ5, C9+(no root), Gᵇ9+(no root), Gᵇ7ᵇ5, C7ᵇ5, Aᵇ9+(no root), and D9+(no root). Quite a lot just for plain old C7!! As usual you must experiment with different inversions to make these principles work. Examples:
BASIC C C7/F.

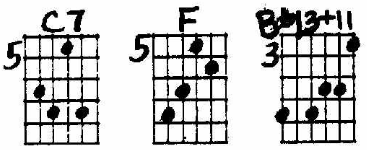


Notice the use of common tones on top of some of these chords. This is one aid to smooth chord resolutions. Notice too, that all these dominant chords are 2 frets apart (C, D, E, Gᵇ, Aᵇ, Bᵇ, C). There will be more on this soon.

Another use of the +11 chord is for the IVm; when using this type of substition, however use the +11 chord whose root is a 4th higher than the root of the IVm.

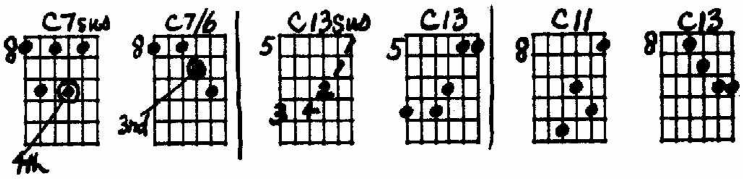
BASIC: C7 F Fm
// // //

SUBSTITUTE:



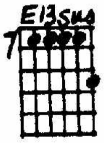
X. Dominant suspended chords are usually used as partial replacements for dominant 7th chords, often being followed with a dominant chord that has a 3rd in it. BASIC: C7

Remember that a C11 without a 3rd can be thought of as C9sus.



Sometimes suspended chords are left unresolved; in other words, they may directly replace the dominant 7th chord.

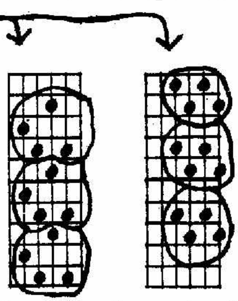
Example: For 4 beats of E7 you could just play:



"Regular" suspended chords (145) generally are used as partial replacements for major chords. For a different type of sound you might try playing groups of sus. chords. For instance, you might play Asus, Csus, Dsus, E^{b}sus, Dsus, Csus, Asus. It is up to you to figure out where to use something like this although forthcoming volumes may talk on this subject of "parallel voicing."

XI. The diminished 7th chord, usually referred to as the diminished chord, is a unique chord. There are 4 notes in the chord and the name is derived from any note in the chord. Example: C^{o} has the notes C, E^{b}, F$^{\#}$,A. This chord can also be called E^{bo},F$^{\#o}$,or A^{o}. Notice that the notes are 3 frets apart (E^{b} is 3 frets higher than C, F $^{\#}$ is 3 frets higher than E^{b}, A is 3 frets higher than F$^{\#}$. On the guitar, any form of the diminished chord repeats itself every 3 frets.

Examples: C^{o}E^{bo}F$^{\#o}$A^{o}



So there are really only 3 diminished chords:
1-C^{o}, E^{bo}. F$^{\#o}$, A^{o} *(each has 4 names)*
2-C$^{\#o}$, E^{o}, G^{o}, B^{bo}
3-D^{o}, F^{o}, G$^{\#o}$, B^{o} although there are numerous forms for playing them, such as the 2 shown here.

The diminished chord can also be thought of as a dominant 7th chord with all the tones lowered except the root. (135^{b}7 becomes 1^{b}3^{b}5^{bb}7 or 6).

The diminished chord is also the same as a 7^{b}9 chord whose root is one fret lower than any note of the diminished chord, (See page 16 on synonyms.)

Diminished chords are used as "passing" chords usually; that is, they go IN BETWEEN other chords. One of the 3 diminished chords will work between any two chords, and sometimes more than one will work. It would not be wise, however, to try to put diminished chords in too much – take a song and try and fit some diminished chords in, and you will hear how appropriate OR inappropriate they can be. Examples: Take the progression C Dm7 Em7 Dm7. This might be played C C$^{\#o}$ Dm7 D$^{\#o}$ Em7 D$^{\#o}$ Dm7 or C C^{o} Dm7 D^{o} Em7 E^{o} Dm7.

XII. When there is a great length of time given to the tonic major chord in a progression (for instance, if you are in the key of C and you have a C chord for 2 bars or 4 bars) some of the following ideas will help to eliminate the monotony: 1) As said before, using extensions such as 7, 9, add 9, 6/9. etc. is acceptable. 2) Alternating between I, IV, or I, and IIm7.

C C C C
Examples: Basic: //// //// //// ////
substitute C7 F C6 C7 C Dm7 C7
// // // // // // ////

3)Alternate between I and V7, 4)Use the follow progression.

C C
Examples: Basic: //// ////
substitute C7 G7/6 C7 C7 Dm7 Em7 Dm7
// // //// // // // //

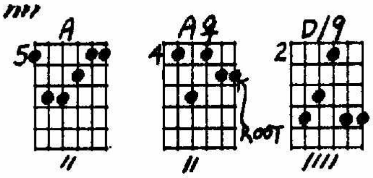
These temporary IV, IIm7 IIIm7, or V7 chords can be referred to as "passing" chords.

XIII. If there is a prolonged use of the tonic *minor* you may relieve the monotony in some of the following ways: 1) Use extensions. 2) Alternate between Im and IVm. 3) Alternate between Im and V7.

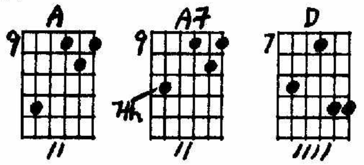
XIV. Try leaving out the 3rd in major type chords for a different type of sound (expecially if you replace the 3rd with a 2nd). This should sound very ancient or very modern, one of the 2 extremes; of course, in the wrong place and/or wrong inversion it will just sound very bad.

XV. Major 7ths and major 9ths that have the root on top or 7th in the bass can be used as good passing chords to a major type chord a 4th higher.

Examples: Basic: A D
//// ////



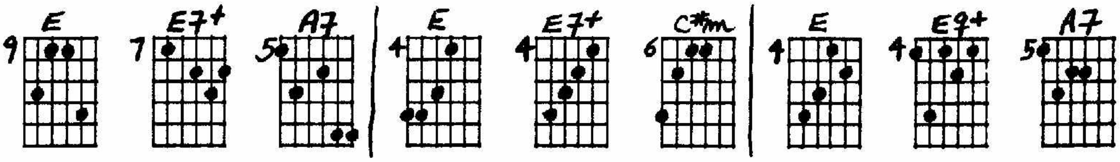
Basic: A D
//// ////



Notice how the 7th in the A7 chord moves down to the 3rd of the D sound. (7 chords with the 7th in the bass have not been listed in this book. However, you may build them by taking a major chord that has 2 (or more) roots, one of which is in the bass, and lowering the bottom root 1 fret

XVI. Major type chords with the #5s are used in place of augmented chords usually when the next chord after the + chord is a 4th higher or a minor chord a 6th higher. They also just work well between I and IV (also I and VIm) chords without the augmented.

Examples: Basic: E E+ A Basic: E C#m Basic: E A



Also, they make good ending chords if an altered sound is desired.

XVII. Major type chords with ♭5s or +11s are often used in harmonizing songs where the melody is (see chord melody section) the ♭5 with a major type chord. They are also excellent ending chords, and good chords to use as a ♭5th substitution.

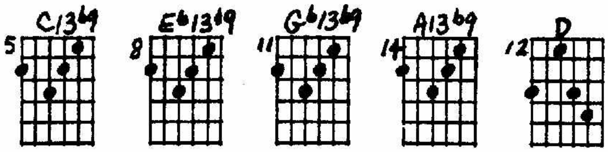
Example: Basic: C E7 A7 D7 G7 C
Substitute: C7 B♭9+ E♭6/9+11 D9 G13 C6/9+11

They are also used after a major chord whose root is 1 fret lower in flamenco music.
Example: A B♭add +11
// //

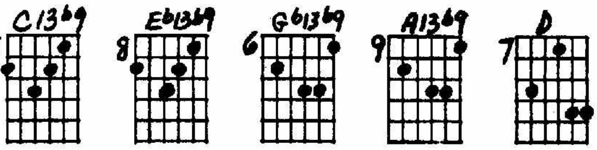
XVIII. Augmented chords repeat themselves every 4 frets the same way diminished chords repeat every 3 frets. Also, like the diminished, the name may be derived from any note in the chord, and again like the ^{o} chords, + chords are mainly used as passing chords. It is wise to think of the + chord as a 7+ with no ^{b}7. Example: C+ = notes C E G$^{\#}$; this chord may be called G$^{\#}$ + or E+ as well as C+. In other words, if you had the basic progression C F you could play C C7$^{\#}$5 F or C C+ F; or if you had this progression F C7 Cm you could play F C7$^{\#}$5 Cm7 or F E+ Cm6, etc.

XIX. Almost any dominant type chord can be moved in intervals of 3 frets as long as the LAST chord resolves into wherever you are going next.

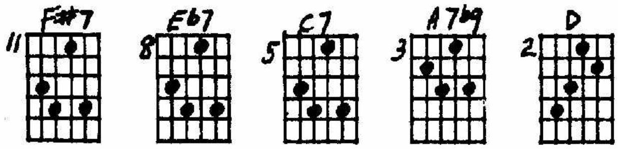
Examples: Basic A7 D


C13b9
5
Eb13b9
8
Gb13b9
11
A13b9
14
D
12

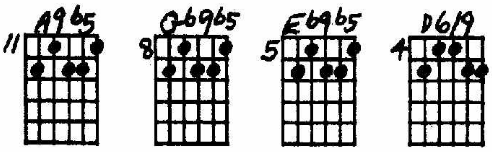
If the last few chords are too high, you may transplat them by using the technique of moving chords over a 4th, as is described on pages 56-57. It could then look something like this:

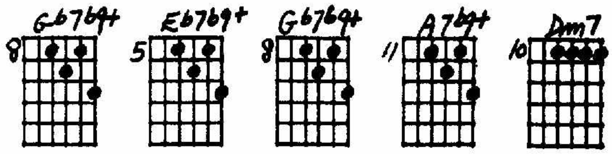

C13b9
5
Eb13b9
8
Gb13b9
6
A13b9
9
D
7

Here is another example of the 3 fret principle:


F#7
11
Eb7
8
C7
5
A7b9
3
D
2

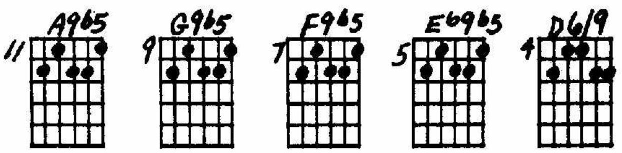
Notice that you *can* actually resolve from more than one of the chords in such a chain. Try resolving to a D type sound from any one of the above chords (like F$^{\#}$7 to D, E^{b}7 to D, C7 to D, etc.) However, the last chord in a case like this will *most often* be the V 7 (or ^{b}5th of the V 7) of the chord you are leading to—in this case A7 or E^{b}7 to D.
Here are some other examples of some possible resolutions:

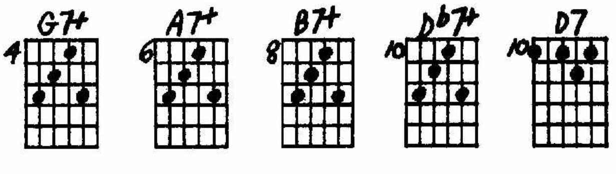

A9b5
11
Gb9b5
8
Eb9b5
5
D6/9
4


Gb7b9+
8
Eb7b9+
5
Gb7b9+
8
A7b9+
11
Dm7
10

Dominant chords that have ^{b}5ths and/or $^{\#}$5ths may be used in 2 FRET INTERVALS effectively, still being careful to resolve nicely. (You may also try 4 fret intervals).

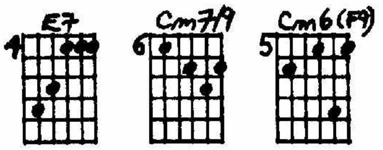
Examples: A7 D

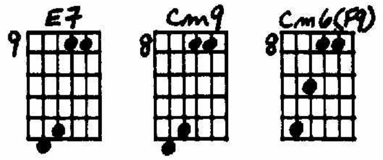

A9b5
11
G9b5
9
F9b5
7
Eb9b5
5
D6/9
4


G7+
4
A7+
6
B7+
8
Db7+
10
D7
10

You may also try using major and minor type chords in 2 fret, 3 fret, and 4 fret intervals. Much experimenting is necessary to really apply this type of stuff.

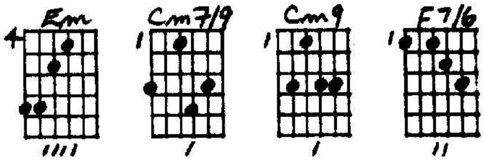
XX. m7 type chords can be used in place of dominant chords whose roots are 1 fret lower (like Cm7/9 for B7). This will only work if the dominant chord is being used as a V7 or V7 function. (See section 12) Example: F#7 B7 Em could be Gm7/9 Cm7 Em6/9. You might also try m7 and m6 types instead of m7 types like Cm9 for B7. Remember from the synonyms about the relationship of m7 chords and 9+, 7+, 6+, etc. AS usual, some inversions sound much better than others. Try the following examples: BASIC: E B7


E7
4
Cm7/9
6
Cm6(F9)
5

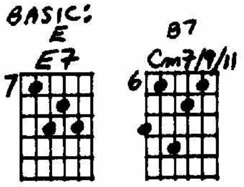

E7
9
Cm9
8
Cm6(F9)
8

Notice that Cm6 = F9 and F9 can be used for B7 due to the ^{b}5th principle discussed earlier.

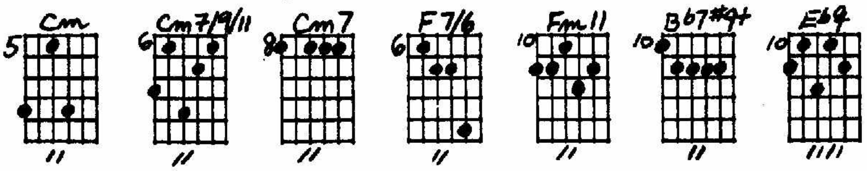
BASIC: Em B7
//// ////


Em
4
////
Cm7/9
1
/
Cm9
1
/
F7/6
1
//

You will note that the Cm7/9/11 chord in this example sounds pretty bad. It is NOT that it is a bad chord, because the same chord makes it in the following example:

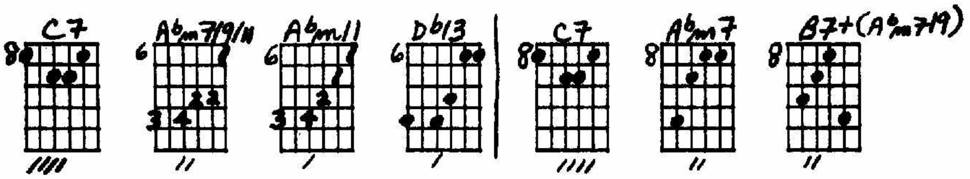

BASIC:
E
B7
E7
7
Cm7/9/11
6

BASIC: Cm | F7 | Fm Bb7 | Eb
//// //// // // ////


Cm
5
//
Cm7/9/11
6
//
Cm7
8
//
F7/6
6
//
Fm11
10
//
Bb7#9+
10
//
Eb9
10
////

The reason the Cm7/9/11 works in the previous example will be discussed in section 13. These last two examples were given to point out, once again, the necessity of finding the right inversion for the right place through experimentation.

Here are some other m7 chords used for dominant chords: BASIC: C / G7
//// ////

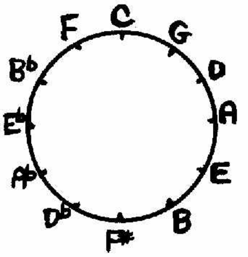

C7
8
////
Abm7/9/11
6
//
Abm11
6
/
Db13
6
/
C7
8
////
Abm7
8
//
B7+(Abm7/9)
8
//

XXI. The 11^{b}9 chords are usually used for the V7 chord of a key, but not often for others like the II7, VI7 & III7.

Section 12

Dominant 7th Chords and the Cycle

In most popular songs, chords of the dominant family are used in certain common patterns. One key for understanding these patterns is found in what is known as the cycle of 4ths (also called the cycle of 5ths). (The reason for the 2 names is that if you go clockwise, each note is a 5th higher than the previous note, and by going counter-clockwise, each note is a 4th higher than the previous one). In most types of music covered in this book, chords usually progress in a counter-clockwise motion. CHORDS WITH ROOTS BASED ON THE CYCLE OF 4THS OFTEN ARE USED IN SERIES. Usually, these chords are of the dominant family as said, but the minor 7th family is also used. Some examples of series of chords that you will see frequently are given below with the series enclosed. They are given in the key of C, but may be moved or "transposed" to other keys.



1)C F (D7 G7)C

2)C (Am D7 G7)C

3)C(E7 A7 D7 G7)C

4)C(A7 D7 G7)C

5)C(A7 Dm G7)C

6)C(Bm7 E7 Am7 Dm7 G7)C

7)C(Em7 Am7 Dm7 G7)

Using the substitution principles from the previous section, you may make these progressions far more interesting; some examples: 1)C7 F6 D13 G7/6 C7   2)C9 Am9 D9+ G7$^{\#}$9$^{\#}$5 C6 etc.

Just as common as series, of dominant chords, is changing to new keys (also called changing to new *tonal centers*) using the cycle; changing to new keys is called MODULATING. One important thing to remember about modulating is that a smooth transition can be achieved if the new key is preceded by a IIm7 V7 progression OF THAT NEW KEY.

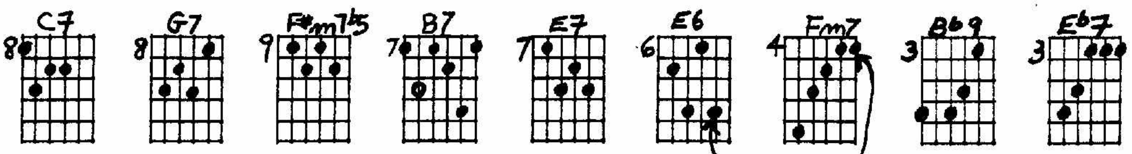
Examples: IIm7 V7 I new key
1)C7 Am7 Fm7/11 B^{b}7/6 E^{b}9 → E^{b}

IIm7 V7 I
2)C7 Dm7 E^{b}m7 A^{b}7 D^{b}7 → D^{b}

IIm7 V7 Im
3)C7 C6 Bm7/11 E7 Am → Am

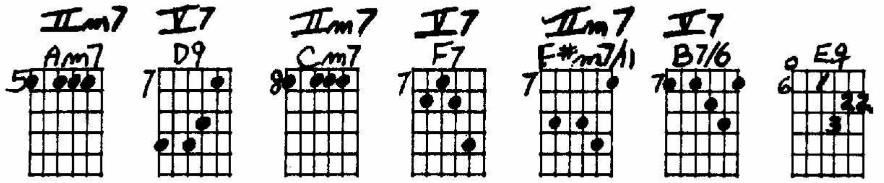
IIm7 V7 I IIm7 V7 I
4)C7 G7 F$^{\#}$m7^{b}5 B7 E7 Fm7 B^{b}7 E^{b}7 → E^{b}

As with other things concerning chords, only certain inversions will go together nicely; you must experiment and use your ears. An example of some possible inversions for the 4th example are:



Sometimes a series of IIm7 V7 chords is used for a short time with no I or Im chords in between.

Example :



Sometimes you will encounter modulations that only use V7 to I of the new key instead of IIm7 V7 to I;

When dominant chords are used as the V7 of the key or THE V7 of a V7, this will be called using the chord as a V7FUNCTION OR DOMINANT FUNCTION.

Example: C G7 E7 A7 D7 G7 C

The G7 is the "pure" V7 of the key of C, but the E7, A7, and D7 are being used as V7 functions because E7 is the V7 of A7, which is the V7 of D7, which is the V7 of G7.

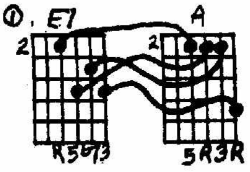
Practice modulating to many different ksys from the key of C. This will help to give you a foundation in hearing chord progressions. COMMON TONES on the top notes of the chords will sometimes help smooth out the transitions. Notice in the above example the modulation to the key of E^b; there is a common tone happening on the E6 and Fm7 chords which smooths out the transition of the chords.

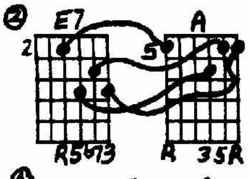
Section 13

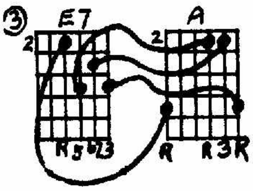
Moving Voices (Voice Leading) and Systematic Thinking

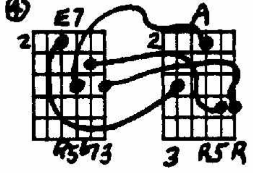
One of the strongest ways to make chords connect smoothly is to treat the notes of each one SEPARATELY. When thinking of the notes of the chords in this manner, each note is called a voice; the way that a voice moves from chord to chord will be called voice leading. Voices and voice leading are both referred to in slang as "lines".

One important chord change that may use the principle of voice leading is V7 to I. Believe it or not, this one simple chord change is the basis for many, many sounds in music. Analyzing this one chord change can alter your whole perspective of music, as you will see (if you already know about voice leading, you have already seen). Play the following examples of V7, I in the key of A. (You will recall that the dominant 7th chord consists of the following tones: 135^{b}7; and the major consists of the following tones: 135).







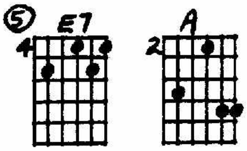


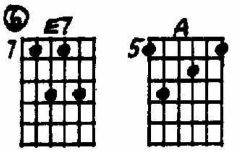
All the lines between these chords are drawn in to show the voice leading. Notice the movement of the different voices in these chords.

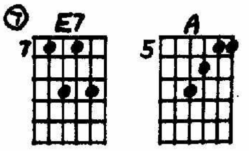
Of particular interest are the following observations:

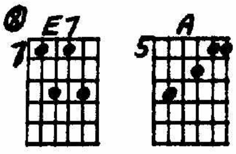
1) The 3rd of the V7 chord moves up to the root of the I chord in each example; this is common procedure for V7 to I.
2) In example 3 there is no 5th in the I chord, but it sounds OK anyway because of the voice leading; leaving out the 5th in a I chord is acceptable in a case such as this.

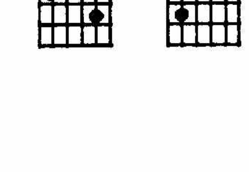
You should now try the following examples:

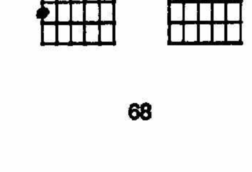


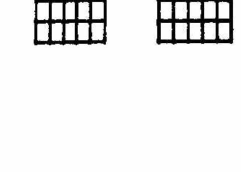






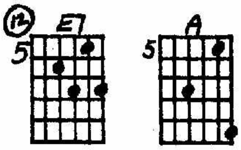




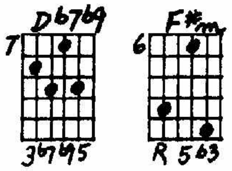


Notice how some of the examples given so far have a more "final" sound, while others sound as if they should keep going. As in the previous examples, listen to each voice separately. Eventually, you will be able to hear all 4 voices at the same time, but at first, a good technique is to play an example, and concentrate on the voice leading of ANY ONE VOICE between the 2 chords. Then play the 2 chords again, listening to a different voice, and so on, until you have done this with all 4 voices. Now try to hear the whole chords together, but still try to hear each voice separately. For instance, take example 6: the bottom voice is E to A; the next higher voice is B to E; next higher is D to $C^{\#}$; and the top voice is $G^{\#}$ to A. So play example 6 five different times, the 1st time listening to the bottom voice, the 2nd time listening to the next higher voice, the 3rd time, the next higher voice, the 4th time the top voice, and the 5th time listening to the whole chord, still trying to hear the individual voices.

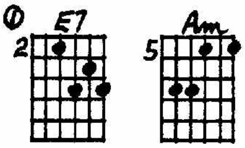
Here is another example of V7 to I: Notice how one voice has disappeared in the A chord, but not really. What has happened is that the D note in the E7 chord moved up to E in the A chord; but the E that was already there in the E7 chord stayed right there for the A chord.

⑫


A better example of 4 voices changing into 3 is the following: This chord change is basically a V7 Im in the key of $F^{\#}$m. The $D^{b}7^{b}9$ is substituted for $D^{b}7$. Notice that the $^{b}7$ and $^{b}9$ tones of the $D^{b}7^{b}9$ chord converge into the 5th of the $F^{\#}$m, thus eliminating one voice.



Now try these examples of V7, Im.

①


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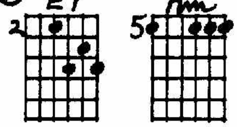

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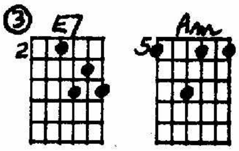

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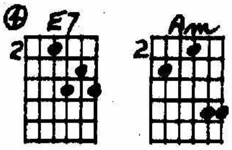

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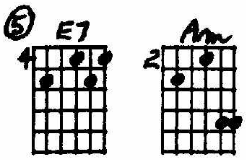
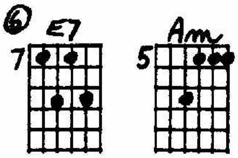


⑥


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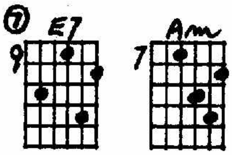

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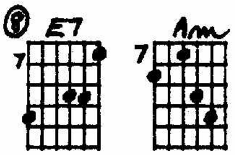

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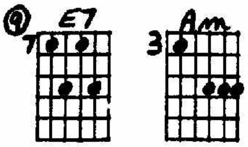

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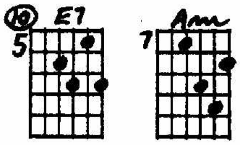
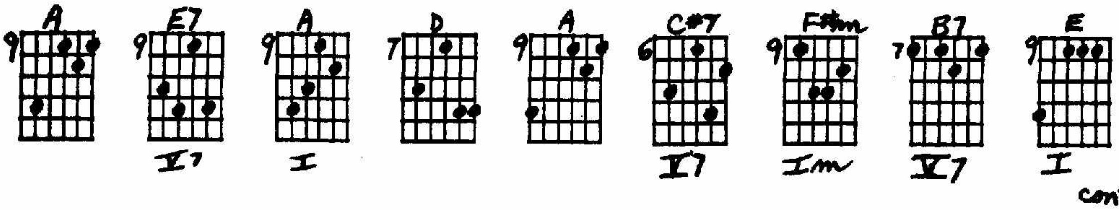


Practice hearing the moving voices as with V7,I; as with most things, the more you practice it, the better you get at it.

Below is an example of a progression that uses a few V7,I and V7,Im changes; again, notice the voice leading.



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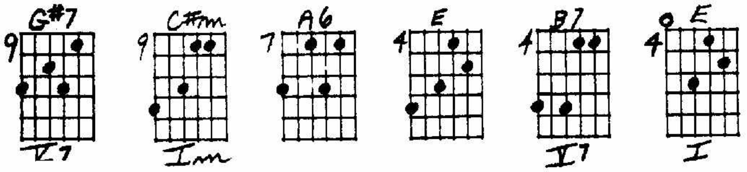
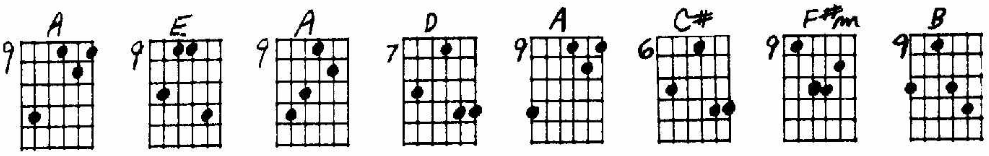
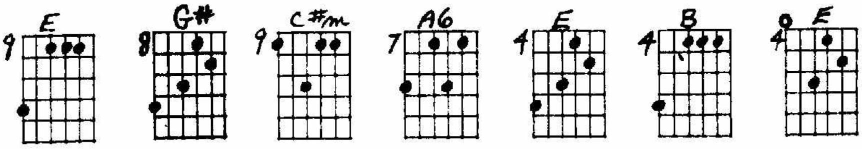

G#7
9
V7
C#m
9
Im
A6
7
E
4
B7
4
I7
o E
4
I

Notice all the V7,I or V7,Im chords. These are considered temporary modulations to these keys indicated by the I or Im chords. In other words, the modulations here are to F#m, E, C#m, and E again.

Instead of V7,I or V7,Im, sometimes the progressions may be V,I or V,Im; that is, you may leave out the b7 tone in the V chord, or replace it with a root, 3rd or 5th. Utilizing this technique, the previous progression might look something like this:


A
9
E
9
A
9
D
7
A
9
C#
6
F#m
9
B
9

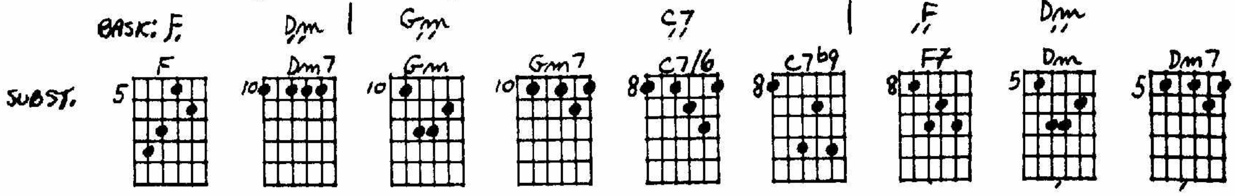

E
9
G#
8
C#m
9
A6
7
E
4
B
4
o E
4

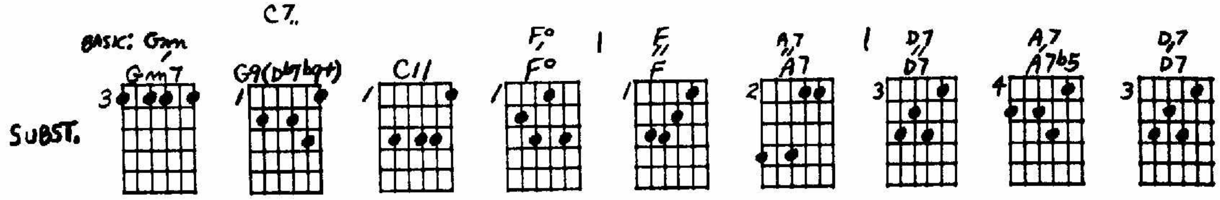
Notice that in some chords the b7 tone is missed by the ear, but some others are fine without it (if not even better).

For a thorough background in the type of sound exhibited in these progressions, it is recommended that you listen to, learn how to play and study the music of Johann Sebastian Bach, George Fredrich Handel, and possibly Domenico Scarlatti. As these men did not write for guitar, many of their works cannot be played on it. However, enough pieces HAVE been transcribed for guitar, and are available at certain music stores. Investigate! Of course, playing the music of these men requires the ability to read notes, as discussed in the introduction to this book.

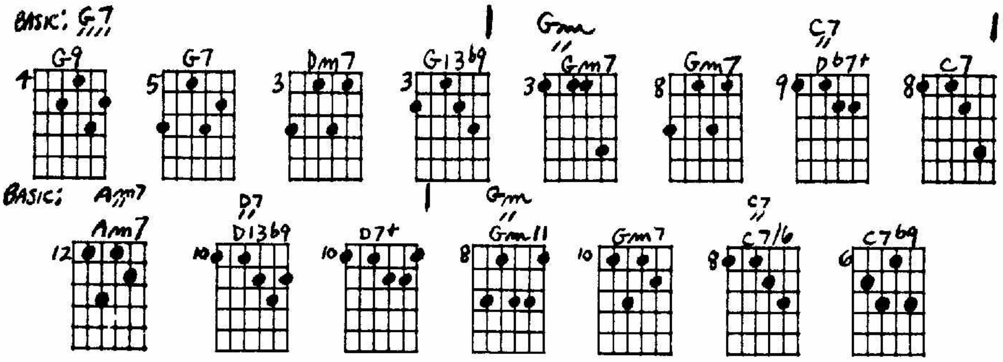
Moving Voices in Other Chords

In moving modern chords, voice leading is of the utmost importance. You should rewrite the following progressions, using different inversions based on the basic chords, being sure that most of the chords have good voice leading.


BASIC: F
Dm
Gm
C7
F
Dm
SUBST.
F
5
Dm7
10
Gm
10
Gm7
10
C7/6
8
C7b9
8
F7
8
Dm
5
Dm7
5

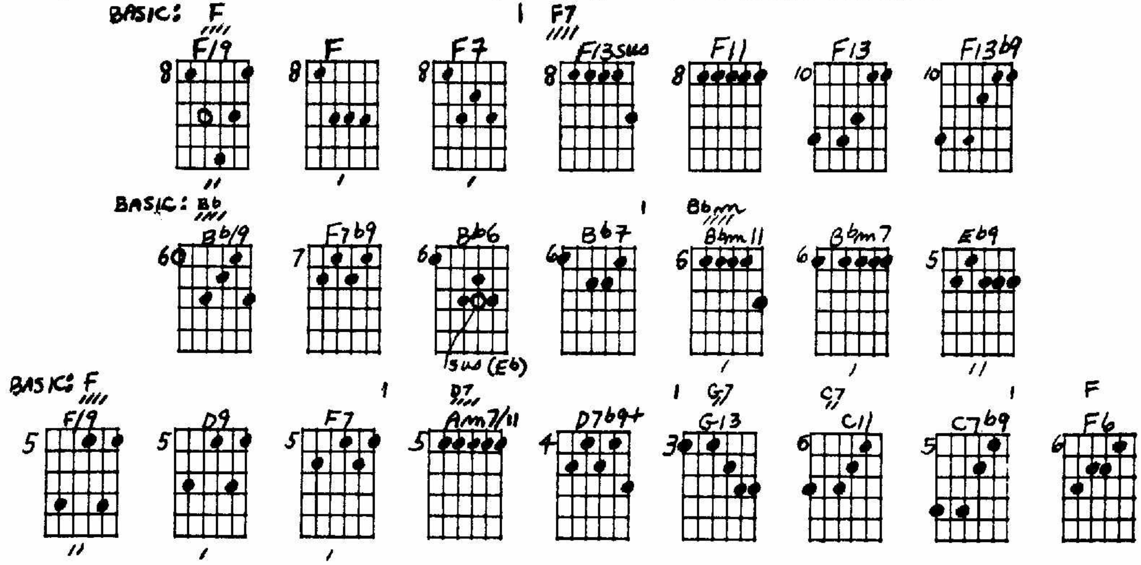

C7
BASIC: Gm
F°
F
A7
D7
A7
D7
SUBST.
Gm7
3
G9(b9b5+)
1
C11
1
F°
1
F
1
A7
2
D7
3
A7b5
4
D7
3

continued→


BASIC: G7 ////
Gm //
C7 //
G9
4
G7
5
Dm7
3
G13b9
3
Gm7
3
Gm7
8
Db7+
9
C7
8
BASIC: Am7 //
D7 //
Gm //
C7 //
Am7
12
D13b9
10
D7+
10
Gm11
8
Gm7
10
C7/6
8
C7b9
6

This progression is an example of paying attention to voice leading. Notice in the 2nd measure how there is a moving voice that overlaps. To explain, notice the G note on the 3rd string in the Gm chord; it is the 2ND voice from the top of the chord. Then notice the notes F in the Gm7 and E in the C7/6 chords. The ear usually hears these 3 notes as one voice, although actually the F and E notes are part of the 3rd voice from the top. So you may think of the 3 notes in this way, that is, as one separate voice, even though they are not. Remember, whatever sounds good to you is what you should do, even if it is contrary to what you have been told. If you like a certain sound and it breaks a rule that you have been told of in this book or elsewhere, do it anyway. Your ears are still the final judge.

Notice in this progression how D^b7 type chords are used twice before C7 types. Using a chord ½ step above or below the next chord is acceptable if good voice leading is employed.

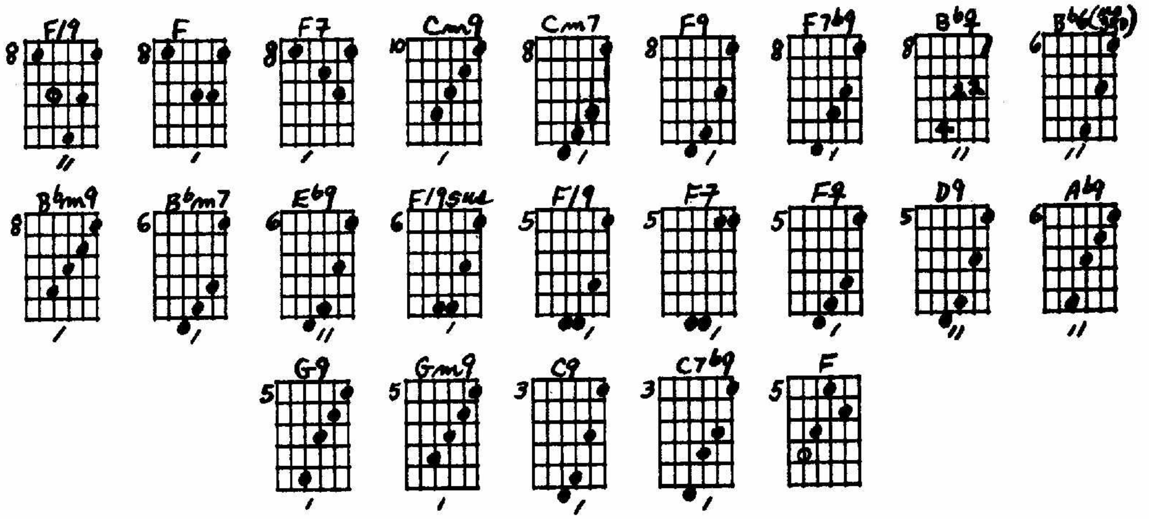

BASIC: F ////
F7 ////
F/9
8
F
8
F7
8
F13sus
8
F11
8
F13
10
F13b9
10
//
/
/
BASIC: Bb ////
Bbm ////
Bb/9
6
F7b9
7
Bb6
6
sus (Eb)
Bb7
6
Bbm11
6
Bbm7
6
Eb9
5
/
/
//
BASIC: F ////
D7 ////
G7 //
C7 //
F
F/9
5
D9
5
F7
5
Am7/11
5
D7b9+
4
G13
3
C11
6
C7b9
5
F6
6
//
/
/

Notice once again the lines in the chords. There are a few interesting substitutions, the first of which is the $F7^b9$ in measure 3. This is just a temporary "passing" chord. Notice that it is the V7 of the B^b chords that it connects; V7s are very common passing chords as was explained in the section on chord substitutions.

Also notice the chords in measure 5 (F add 9, D9, F7). These chords are not thought of as substitutions, but are arrived at by the 2 moving lines. They are just the result of an experiment that worked, that is, to get from F add 9 to Am7/11, moving the 2 voices down was tried and it sounded OK; so it was kept. This points out one advantage of thinking in lines: that is, that you find things you never would find if you held to ONLY substitution principles.

Notice too the E^b9 for the B^bm. Quite often following a minor 7th type chord a dominant chord whose root is a 4th higher will be used. You will also see this in the section on blues progressions.

Here is the same progression as before, but most of the substitutions are in CLOSE VOICING. In other words, all the voices are grouped as closely as possible. You should really be able to notice the moving of the voices in this arrangement. These chords may be extremely difficult at first, but if you practice them without giving up, the muscles and tissues in and between your fingers will actually stretch, and in time, you will be playing these chords without too much trouble.

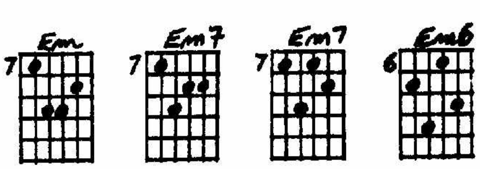


Notice the Gm9 which is anticipating the C7 in the next ½ of the measure. Anticipations such as these are acceptable in most cases.

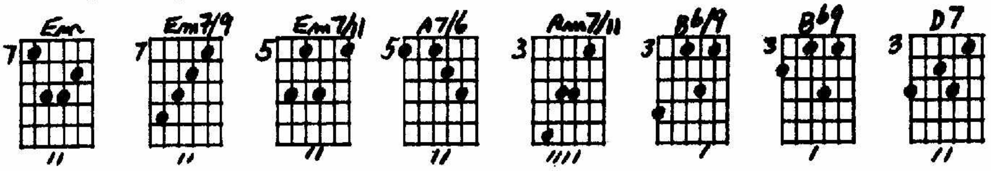
By now, you have probably noticed that this business of moving voices requires much patience as well as concentration. Try to develop systems. For example, notice that if you lower ONE root in a major chord that has TWO roots, you will get a major 7th chord. Store facts like this one in your head, and pretty soon, you will be moving voices smoothly.

Moving Voices in Special Chords

There are certain kinds of chords which almost necessitate the use of voice leading principles. One of these is the m♮7 TYPE – remember, this means any minor chord that has a natural 7th (such as m♮7, m♮7/9, m♮7/9/11). This type of chord may be used as an ending chord, and when this is the case, voice leading is not absolutely necessary. In other words, the chords that would precede it do not HAVE to lead in to it with smooth voice leading, although it would probably be desirable anyway. However, the m♮7 type of chord is usually used in conjunction with m, and m7 (and sometimes m6) type of chords, and when this is the case, smooth voice leading is essential. The critical note to watch for voice leading is the ♮7. Play the following group of chords:



Notice the voice leading on the 3rd string. This series of chords could have been used for an Em chord. Suppose you had 4 beats of an Em chord in a song. Try strumming the Em♮7 chord for 4 beats – it may sound a little strange to you. But it does fit when used with the chords above. So, generally it is thought of as a passing chord. As your ears grow more accustomed to modern chords, you may grow to like the sound of m♮7 types, even when used by themselves. Now try the following chord patterns:



BASIC: Em //// Em //// Am //// D7 ////

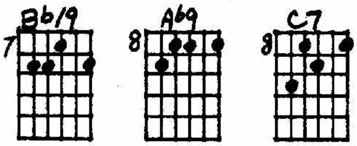
Notice the voice leading on the 3rd string in the first 2 measures. Again the root keeps going down 1 fret at a time: first to the ♮7, then the 6.

Also notice that an A7/6 is used for Em. Well, remember in the 4 chords you played before how the last one was Em6; and also remember that Em6 = A9 (no root) according to the synonyms. So, instead of A9, A7/6 was used. Also an A7 type chord leads pretty smoothly into an Am7 type chord, since all you need lower is one note, the 3rd – to the ♭3rd.

You will notice the pleasing inversion of Am7/11; and then the next 2 chords which WERE NOT DERIVED FROM A SUBSTITUTION RULE, but from voice leading. Notice that the top 2 notes in the B♭ add 9, B♭9, and D7 chords are the same. The bottom notes are what produce the effect of voice leading.

There are quite a few chord changes like the B♭ add 9, B♭9, D7 type that have been found just from experimenting with voice leading. Some others are:

①



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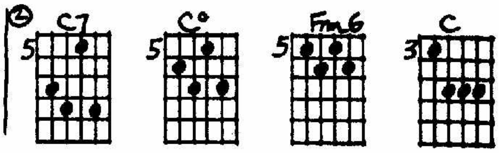
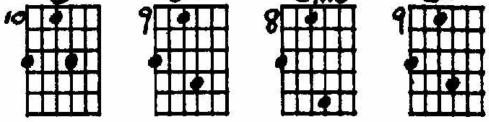
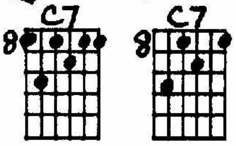


③

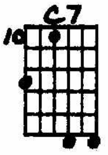


When you see an example such as one of these, you may see it just as it is: that is, as just one example; OR as the key to many possibilities due to what will be called SYSTEMATIC THINKING. This involves breaking down each chord into its tones, and analyzing each voice. For instance, take the 2nd example given above, C7 C° Fm6 C, and analyze it. That is, notice that to get from a C7 to a C° chord, you lower everything but the root; next, to get from C° to Fm6 you lower the 3 notes that just moved, once again, one fret; and then to get from Fm6 to C, you lower the 6th of the Fm6 to the root of the C chord; also ♭3 of Fm6 lowers 1 fret to the 5th of C, and the 5th of Fm6 (the C note) can stay right where it is, since it is a root of the next chord; and finally, the root of the Fm6 (F) is lowered 1 fret to get the 3rd of the C chord. So, if you were to take this information,you could theoretically start on any C7 chord and arrive at a C chord by way of C° and Fm6. The reason the word theoretically is used is that some chords may yield others that would be physically impossible to play.

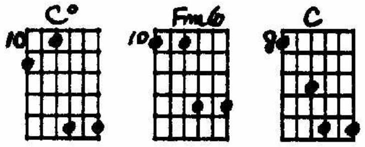
It is largely due to voice leading and systematic thinking that so many chords are listed in the reference charts. That is, some chords that may not seem practical are excellent when used with nice voice leading. For instance, in example 1 – B♭add 9 E♭m6 C7, the following chord was used for C7. If, like most guitar players, you had been playing the bar chord quite often for C7, and did not know about voice leading, you would wonder why or where you should use this chord. But you should see why it is useful now. And that goes for all the chords in this book. With good voice leading, they all can be used, although the altered ones will take more effort to get accustomed to earwise.



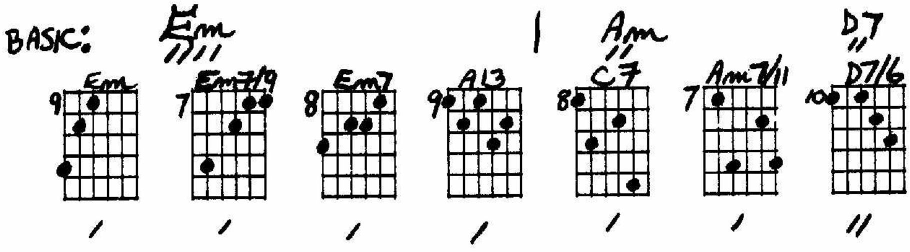
Back to the 2nd example: C7 C° Fm6 C; try starting on this chord and figuring out the next 3 chords. Don't look at the following chords until you have figured out the C°, Fm6, C. Now, you should check yourself. Practice systematic thinking with everything you can, and your knowledge will multiply greatly.



For this type of sound, it is recommended that you study the music of George Gershwin and other composers of the early twentieth century, especially SONG writers of this period.



Getting back to the m7̶ type chords, here is another example of the use of one of these chords. Notice in this example that the ♮7 tone in the Em7̶/9 chord goes up to the root in the m7 chord that follows while in the samples on page 72, the ♮7 went down to the $^{b}7$. You can formulate a rule from these 2 examples concerning m7̶ type chords – that is, when using m7̶ type chords with m7 type chords of the same root, the 7 TONE SHOULD MOVE UP 1 FRET or DOWN 1 FRET INTO A ROOT OR $^{b}7$ TONE.



Section 14

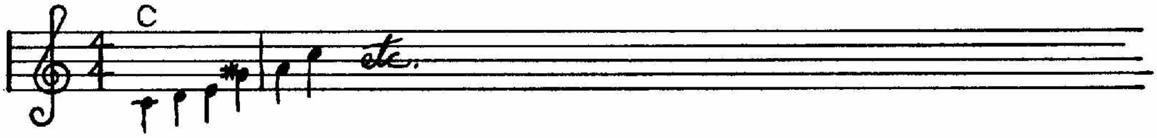
Chord Melodies

First of all, the term chord melody refers to the playing of the melody AND the chords of a song at the same time. Any guitarist with the ability to play chords and switch from one to another at a moderate tempo, can play chord melodies, with a reasonable amount of practice.

The basic chords and melody are therefore the first things to be learned on any song on which you choose to play a chord melody. These can be found in sheet music (obtainable from many music stores) or if there is no sheet music for a song you would like to work on, you might have to buy a record, and use your ear. Fortunately, sheet music IS available for many beautiful songs, and this book will try to illustrate how to work from the sheet music to build a chord melody.

Basic Concepts

1) It is almost always necessary to raise the melody one octave higher for chord melodies. If you did not, the melody would often end up on the 5th and 6th strings, making it impossible to play chords, since the melody must be on top. (More on this to follow.)
2) The melody usually corresponds to one of the tones of the basic chord that is written above it, or to one of the tones of the extensions or altered chords with the same root as the basic chord. Example: Let us say that you looked at the 1st measure of a song, and the chord symbol was C major (remember that this would be written as just C, because no symbol is used for a major chord), and the first melody note was also C, like this:

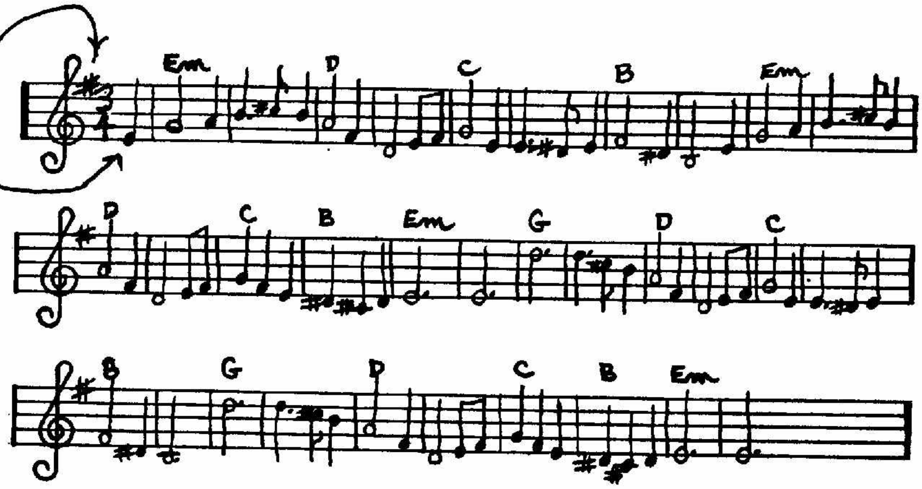


You can see that the C melody note is the root of the chord above it. Let us say that you had a D melody note with a C chord like the 2nd note of the above example. This D note does not correspond to the notes of the basic chord here (C), but it does correspond to the 9th tone of some extensions of the C chord, like C add 9, C~~9~~, C6/9 and C~~13~~. Using the same logic, notice that the E note in the above example corresponds to the 3rd of any C chord; then notice that the G# note would be the #5th of a C chord which would correspond to the C+, C7+, C9+, etc.

You will find that since almost all melody notes correspond to the basic chord written above them, or to the extensions or alterations of that chord, you can theoretically play a chord on almost every note of the melody. This becomes a matter of taste as you will see; This book will use the song "Greensleeves" as a model to illustrate the art of chord melodies, starting with a fairly simple arrangement, and progressing to more complex.

3) When playing chord melodies, as said before, the chords and melody are played together; an important factor is that the melody is always played ABOVE the chord, not in the middle or in the bass. Examples will follow soon.

Here is the way you might see this song printed up:

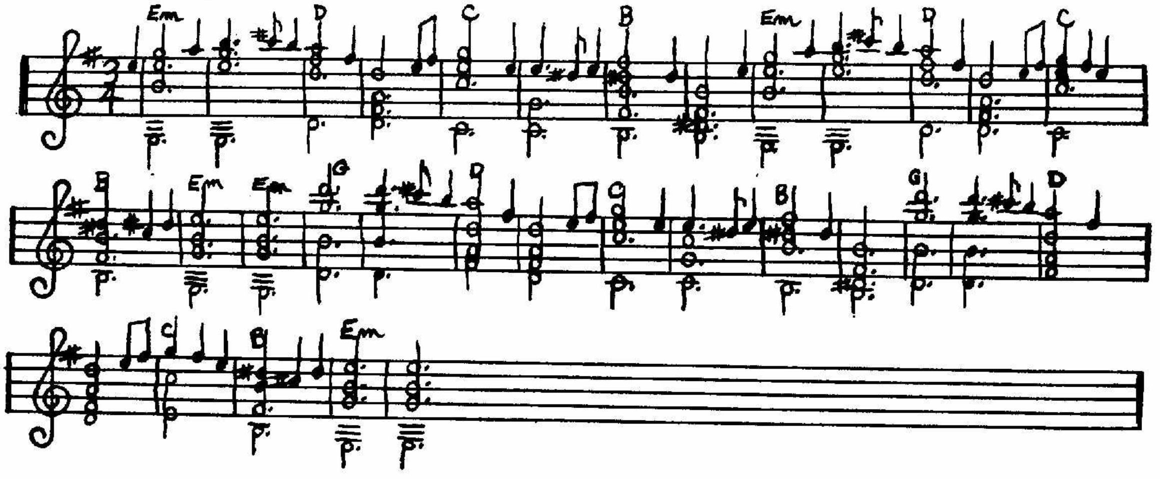


You should know that this means all F's are sharped throughout the song. This is not considered a measure; the next measure will be referred to as measure 1. Also this 1st E note does not fit with any chord really. It is referred to as a pickup note.

Notice that there is no chord symbol over the 2nd full measure; likewise, the 4th, 6th, and some other measures throughout the song. When this is the case, the chord from the previous measure is still being used, so rather than write it again, people generally omit it. Example: the chord in measure 2 is Em, the chord in measure 4 is D, in measure 6, C, and so on.

When harmonizing a melody (that is, playing a chord melody) in a simple manner, chords are generally played every few notes, not on every note. In the above song, certain places seem to suggest that the chords should be sounded more than others. These places are the 1ST NOTE IN EACH MEASURE; this is not ALWAYS the case in ANY song, but it is found very often. One reason for the importance of these places IN MOST SONGS is that the 1st note in each measure corresponds to one of the notes of the basic chord above it; again, this is a common thing to find. In songs where there is more than one chord for each measure, usually the 1st note under EACH CHORD corresponds to one of the basic notes of that chord.

Anyway, here is what a very basic chord melody might look like, moving the melody up one octave and playing chords on the 1st beat of each measure. Wherever possible, you may let the chords ring for all 3 beats of a measure while you play the melody. Therefore, most of the chord notes will be written as dotted ½ notes.



This arrangement sounds pretty dull because it is so basic. One change that could be used to brighten it up a bit is USING RELATIVE MAJORS AND MINORS; to explain, any chords that have the same key signature are called relative chords. Below is a list of them:

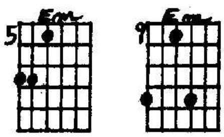
RELATIVE CHORDS

A↔$F^{\#}m$	E^{b}↔Cm
B^{b}↔Gm	E↔$C^{\#}m$

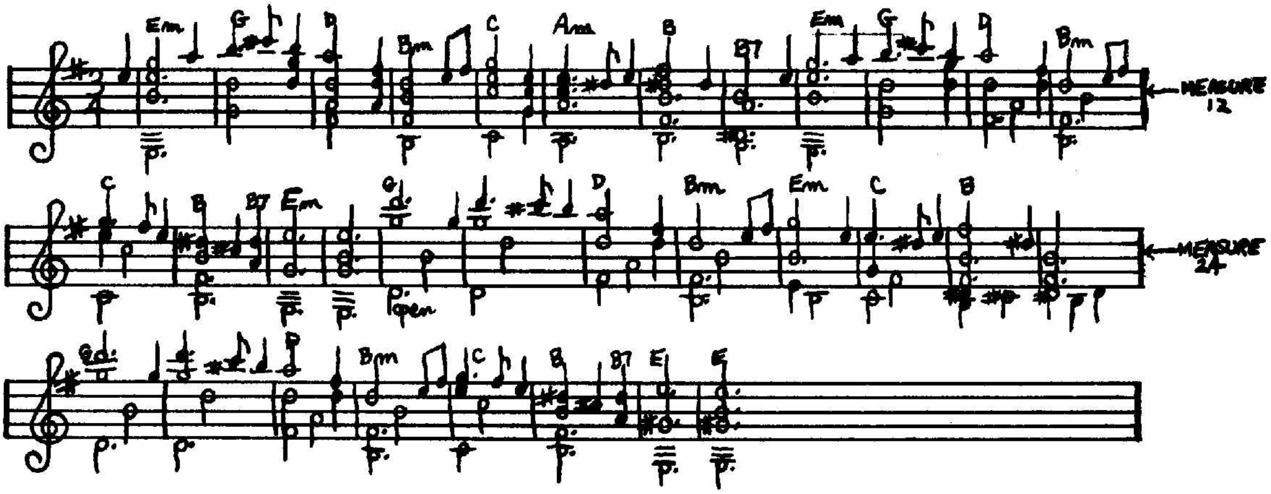
B ↔ A♭m (G♯m)
C ↔ Am
D♭ ↔ B♭m
D ↔ Bm
F ↔ Dm
(G♭) F♯ ↔ E♭m (D♯m)
G ↔ Em
A♭ ↔ Fm

Sometimes you may replace one of the relative majors with a relative minor or vice versa. So in the 1st 4 measures of Greensleeves, instead of it looking like this: Em/Em/D/D, it could be Em/G/D/Bm or G/Em/Bm/D; however this 2nd way that starts on the G chord might not sound right if you are used to hearing the 1st chord as a minor. Also, the Bm in the 3rd measure would have to be a m7 type because the A melody is the ♭7th tone of B. This brings up a point about substitutions; theoretically, you may substitute any extension of a chord for the basic chord, but you will find certain chords are far better than others in certain places, if you are experimenting as you should be. Incidentally, if you do not see the logic behind how each chord was derived in the arrangement, a word of explanation should help. To find the right chord for a given melody note, you can ANALYZE THE RELATIONSHIP OF THE MELODY NOTE TO THE CHORD AND FIND A CHORD THAT HAS THIS RELATIONSHIP ON TOP. Example: the 1st chord was Em and the 1st melody note with this chord was a G note; now analyzing the G note in relation to the Em chord, you find that it is the ♭3rd; so according to the above concept, you need an Em chord with a ♭3rd on top. You could now turn to the chord reference charts and look for minor chords that have the ♭3rd as their highest note. You must be careful to find a minor chord that has the ♭3rd in the correct octave, however. Example:

This chord has as its highest pitch a ♭3rd, but in the wrong octave for the song (too low). The following chord has the ♭3rd as its highest pitch in the correct octave.



Back to brightening up the arrangement, another tool is the addition of a few more chords or fragments of chords in certain measures. Try this following arrangement that uses relatives and a few more chords.



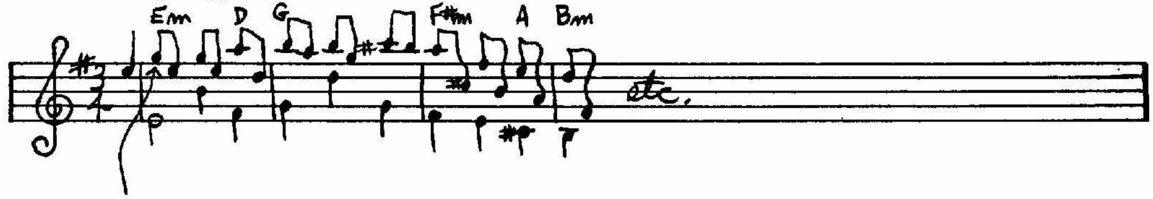
Points of interest in this arrangement:

1) The use of more than 1 chord in certain measures. When this occurs here, the extra chord added is the same as the 1st chord in the measure: like in measure 2, there are two G chords.
2) The B7 chord used twice instead of B   remember from the previous sections that the V7, as well as the V chord will lead to a I or Im.
3) Some of the chord notes are put on beat 2 by themselves, as in measures 11, 12, 13, etc. This seems to fill out the sound a bit.
4) In measure 21, Em is used for C; sometimes a major chord is replaced by its IIIm – this is similar

to the relative minor concept, but be careful where you do this. Let your ears tell you if it is right.

5) In measure 22, the F# note is not a note of the chord; however it is the 6th of Am (which could have been used for C, according to the relative minor concept), and in combination with the rest of the notes, it gives the sound of Am6, which is acceptable here to most ears.
6) In measures 23 and 24, the bass line note C# is just part of a line between the root (B) and 3rd (D#) of the B chords. If you haven't read the previous section (13), you should go back and read it to understand the moving voice (line) concept better.
7) The last chord is E instead of Em. Ending on a major is an often used technique in minor songs. It is really a matter of personal taste, nothing more.

For more movement in this song, you might try playing all 1/8 notes as in the following example: note the D chord used in the 1st measure as a V chord of the next G chord. This smooths out the transition to the G chord. This technique of putting in V chords right before another chord will be called back-cycling; more on this to follow.

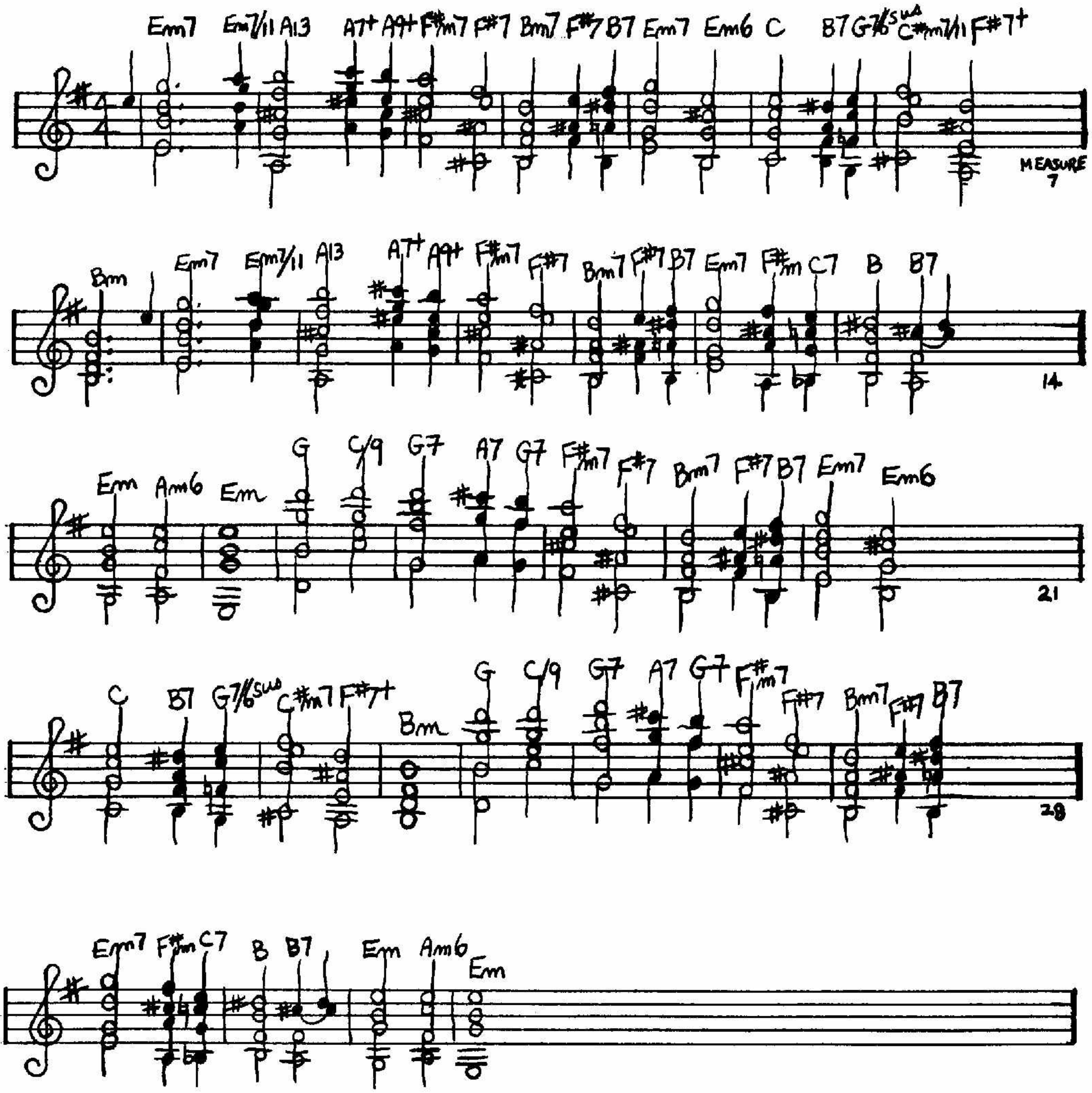


Hold the G note while you hit the next E note for a more fluid, chordal sound; likewise, with the rest of the notes in this type of style.

Notice also the F#m and A chords used before the Bm. The F#m can be thought of as IIIm for the D chord which was the basic chord in the 3rd measure; the A chord and the notes preceding it were derived by thinking in lines. For instance, the melody notes in this measure are A, F#, E, and then D is your first note of the next measure. Some experimentation led to a bass line that follows right along and resolves from F#m to Bm – the A chord along the way was more or less an accident, because if the melody is E and you play a C# bass, it sounds like an A chord, especially if you add an A note after this while still holding the 2 notes as in the above example.

To really understand this type of sound, as said before it would be wise to study the music of J. S. Bach, Handel, and D. Scarlatti. They were masters of LINEAR type of music.

Now, for more "jazz" oriented sounds we can take the same song and possibly play it in the following way. (notice that the meter has changed to 4/4 now. Try playing this with a bouncy, swingy feeling, and syncopating the rhythm for that nice "jazz" feel.)


Em7 Em7/11 A13 A7+ A9+ F#m7 F#7 Bm7 F#7 B7 Em7 Em6 C B7 G7/6sus C#m7/11 F#7+
MEASURE 7
Bm Em7 Em7/11 A13 A7+ A9+ F#m7 F#7 Bm7 F#7 B7 Em7 F#m C7 B B7
14
Em Am6 Em G C/9 G7 A7 G7 F#m7 F#7 Bm7 F#7 B7 Em7 Em6
21
C B7 G7/6sus C#m7 F#7+ Bm G C/9 G7 A7 G7 F#m7 F#7 Bm7 F#7 B7
28
Em7 F#m C7 B B7 Em Am6 Em

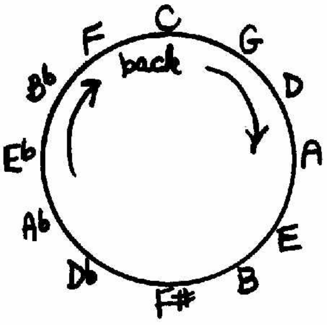
Points of interest in this arrangement:

1) The extended and altered chords give more of the jazz sound than the previous arrangements of this tune.
2) Notice the A7 type chords in measure 2 where the basic chord was Em; also remember that in measure 3 the basic chord was D. This is a case of back-cycling again – that is, putting in the V7 of D before the D. Think of the Em as being the IIm of D. IF YOU HEAR IIm TO I, YOU MAY THINK IIm V7 TO I INSTEAD, if you start looking for these possible IIm V7 progressions, you will grow to hear them instinctively.

The altered dominant chords used here for A7 (A7+ and A9+) correspond to the concept that altered dominant chords can be used for a regular dominant chord (see page 58) when the next chord is a 4th higher (in this case D). So even though F#m7 is used for D, since the BASIC chord was D which is a 4th higher than A7, you may use this concept. Speaking of that F#m7, remember from the previous arrangement how the F#m was used for D; once again, it is because sometimes you may replace a major chord with its IIIm.

3) Notice the F#7 in measure 3. This leads better to the Bm than F#m; once again, this is putting in a V7 chord to smooth out the transition; in other words, F#7 is the V7 of the NEXT chord, Bm7.
4) In measure 4, the F#7 and B7 are gotten by back cycling from the next chord. The difference is

that here you go back TWO chords in the cycle from the Em7 instead of one. To further illustrate, look at the cycle: if you go back 2 chords from any chord, you get the V and the V OF THE V.



5) Measures 6 and 7 – B7 G7/6sus C$^{\#}$m7/11 F$^{\#}$7+ – first of all, the B7 was arrived at by chance. It replaces a D7 type chord just because it blends well here; remember that dominant chords 3 frets apart are related because of the diminished chord which is a 7^{b}9, like D7^{b}9 (no root) = B7^{b}9 no root; so in analyzing, think of the 4 chords as D7 G7 C$^{\#}$m7 F$^{\#}$7. One thing to note is that the B in measure 8 was replaced by Bm – no rules here – just an ear thing. OK. So back cycling from Bm two chords, you get C$^{\#}$m7 and F$^{\#}$7 or C$^{\#}$7 and F$^{\#}$7; sometimes when back cycling, you can use chords a ½ step higher than normal, following with chords that are the normal ones for back cycling; in other words, now you could have the following possible chords for the 4 chords that have been discussed here: 1-D7 G7 C$^{\#}$7 F$^{\#}$7 or 2-Dm7 G7 C$^{\#}$m7 F$^{\#}$7 or 3- Dm7 Gm7 C$^{\#}$7 F$^{\#}$7, etc. Any series of m7 or 7th types on these chords would theoretically work as long as the last chord in a series like this is a dominant type, NOT a minor type. (A *major* type chord can be used on the ^{b}5th of the V7 sometimes; in this case C major could be used for F$^{\#}$7).

You can also use chords a ^{b}5th higher than those in the cycle if you like the sound. Example: First, suppose for the 4 chords that are being discussed, that you back cycled all the way from Bm. Instead of D7 G7 C$^{\#}$m7 and F$^{\#}$7 types you could have E^{b}m7 A^{b}7 C$^{\#}$m7 F$^{\#}$7 or E^{b}7 A^{b}7 C$^{\#}$7 F$^{\#}$7, etc. Anyway, using ^{b}5ths these chords could now be Am7 D7 G7 C7 or Am7 D7 C$^{\#}$7 F$^{\#}$7 or A7 Dm7 G7 F$^{\#}$7 or quite a few other combinations.

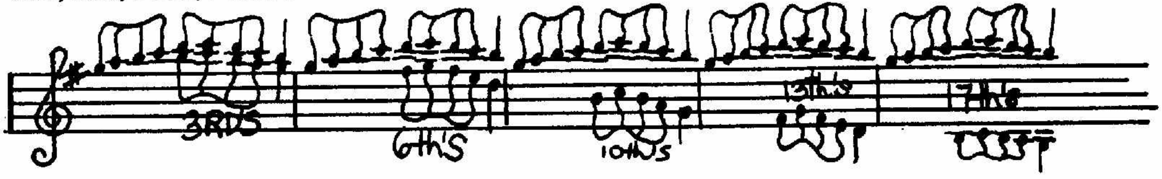
6) Measures 13 and 14 – again back cycling from B; this time, the next chord back from B is F$^{\#}$. The ^{b}5th of F$^{\#}$ is C, and actually the F$^{\#}$m was arrived at by thinking in terms of lines. Notice the voice moving between F$^{\#}$m, C7, and B.

7) Also notice the voice leading between B, B7, and Em in measures 14 and 15. The Am6 in measure 15 is the concept of playing a IVm to relieve the monotony of 2 measures of the Im chord; this is very common.

8) Next notice the G, C add 9, G7: again I IV I to relieve the monotony of too much I.

9) Then A7 G7 – the A7 is just a passing chord to the G7, but this can be thought of in another way; that is, the basic chords are G G D. So you could think G Em D because of the relative minor concept. Then you could think of the Em to D as a IIm I progression, and finally, filling in the V7 chord, you could get G Em A7 D; so you may just take the A7 and use it as a passing chord.

Sometimes, if the song is too fast for chords, or for a different sound, you may harmonize the melody with notes that are a 3rd, 6th, 10th, 13th, or 17th interval BELOW the melody. This works well when the part of the melody you want to harmonize is in one scale only. Then the notes below it should be in the same scale. Below are some examples of a melody in the key of G hharmonized with 3rds, 6ths, 10ths, 13ths, and 17ths.

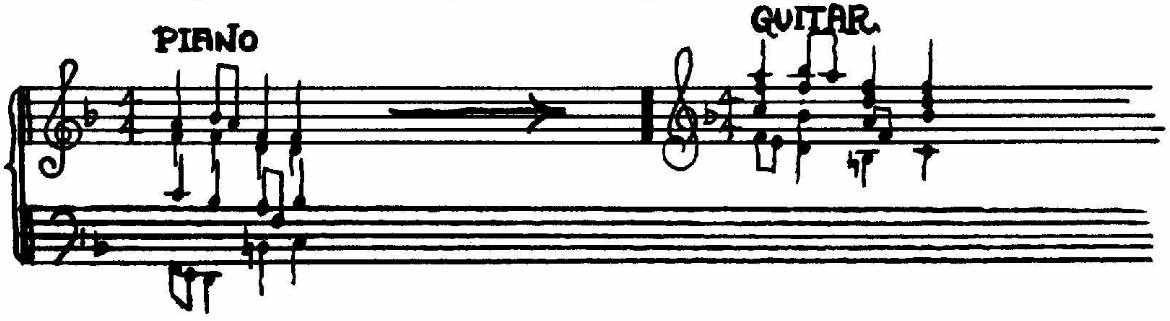


If this confuses you, see the section on scales and harmonies (page 86). This type of sound (3rds, 6ths, and 10ths, etc.) must be treated with care; there are places where it sounds good, and places where it does not. You might also experiment with other intervals such as 4ths, 5ths, etc.

There are quite a few other ways to harmonize songs, but space does not permit discussion of them in this book.

Using Piano Arrangements (ASSUMING YOU CAN READ BASS CLEF)

There are many useful ideas that guitarists can learn from the study of piano arrangements. You will almost always have to transpose notes from the piano part up 1 octave, and sometimes the notes of the bass clef might have to be moved up 2 octaves. Example:



Notice that if the whole paino part had just been moved up 1 octave, the 1st two chords would not have been playable on the guitar. So, by moving the bass notes up 2 octaves, it works in this case. Also notice that there are actually 4 voices moving independently, each singing out its own melody. Pianists generally think in terms of voices more than guitarists, so you may learn a lot about this from the study of piano arrangements. For a firm foundation in 4 part harmony, it is recommended that you study the chorals of J. S. Bach. (There are a few hundred of them).

Section 15

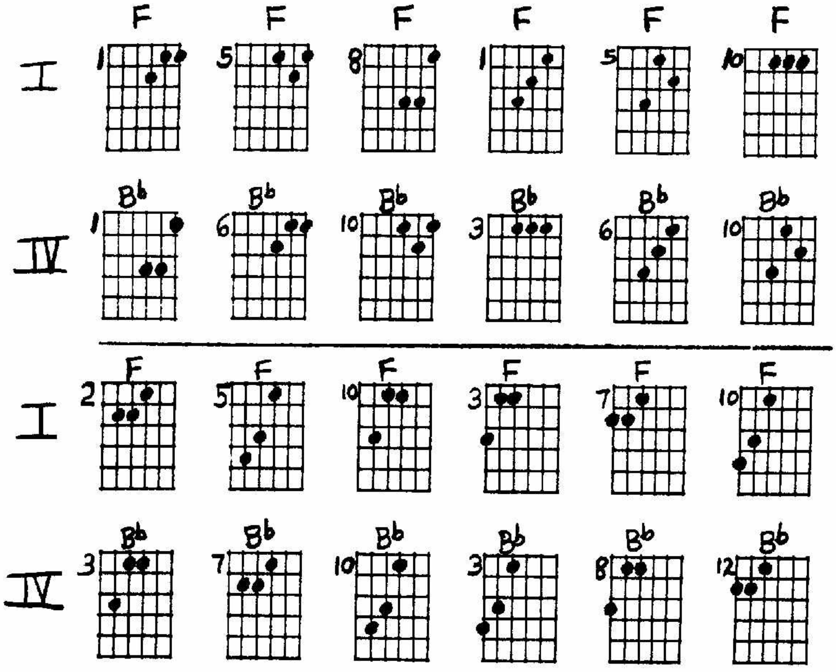
Triads

The term triad refers to any chord with 3 notes in it. The only real triads are: 1)–major (1 3 5), 2)–minor (1 $^{b}3$ 5), 3)–augmented (1 3 $^{\#}5$), and 4)–diminished (1 $^{b}3$ $^{b}5$); however, sometimes the dominant 7th, minor 7th, minor 6th, and other 4 note chords are played as triads by leaving out either the root or 5th. (In dominant 7th chords, sometimes the 3rd is left out.)

When the tones of the triad are arranged as closely as possible, the triad is in what is called CLOSE OR CLOSED VOICING. There are only three different arrangements of tones that are closed voicings; these are:

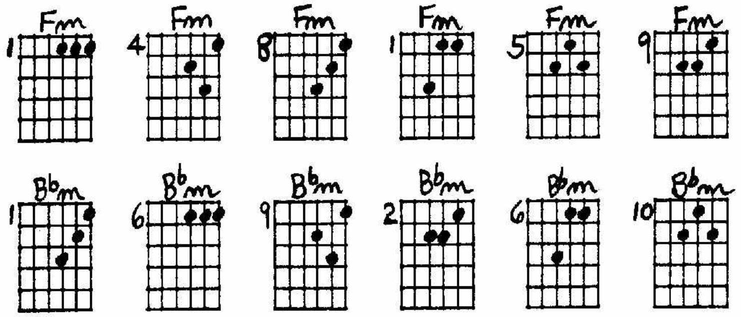
1) Root in the bass, 3rd of the same octave directly above the root ($^{b}3$rd for minor and diminished triads), and 5th of the same octave directly above the 3rd ($^{b}5$th for diminished, $^{\#}5$th for augmented).
2) 3rd in the bass ($^{b}3$rd for minor and diminished), 5th of the same octave directly above the 3rd ($^{b}5$th for diminished, $^{\#}5$th for augmented), and root of the next octave directly above the 5th.
3) 5th in the bass ($^{b}5$th for diminished, $^{\#}5$th for augmented), root of the next octave directly above the 5th, and 3rd of this new octave directly above the root ($^{b}3$rd for minor and diminished).

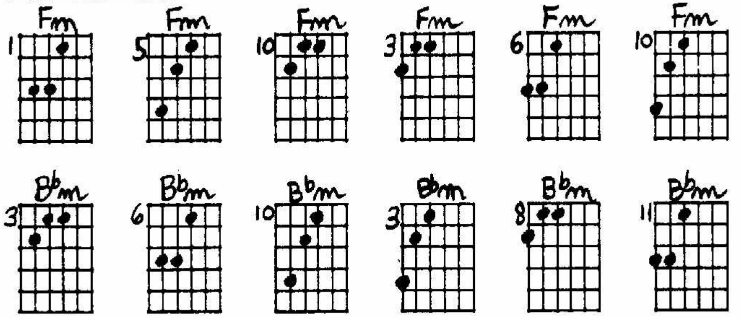
There are only 12 different forms of the close voicing major triad (for any key) on the guitar. They are listed here in the key of F with the IV major that most closely relates directly below each I chord. The reason for this is that I to IV is probably the most often used sound in many types of music that are based on triads, and it should be memorized as soon as possible all over the neck.



Closed Voiced Minor Triads (Im and IVm) (Key of F)

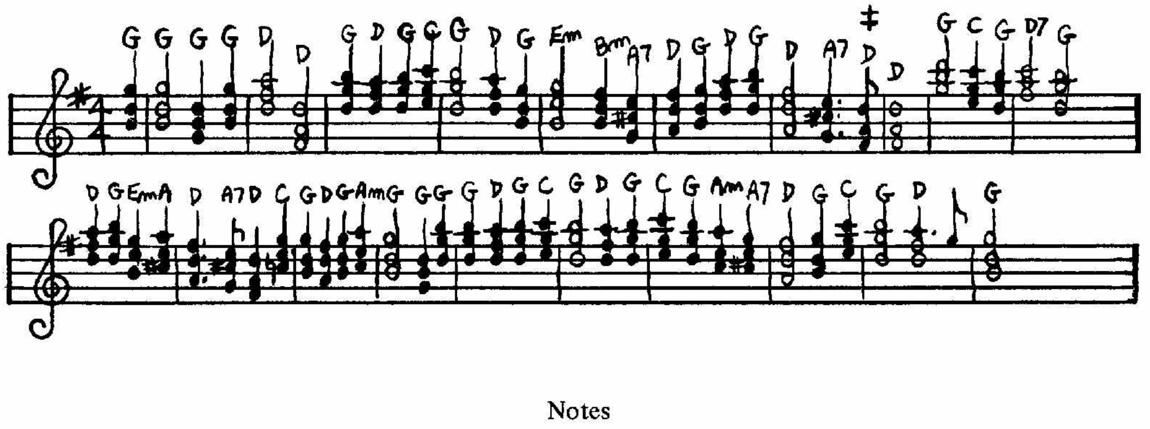
Here is the same setup but this time with MINOR triads.


Fm
1
Fm
4
Fm
8
Fm
1
Fm
5
Fm
9
B♭m
1
B♭m
6
B♭m
9
B♭m
2
B♭m
6
B♭m
10


Fm
1
Fm
5
Fm
10
Fm
3
Fm
6
Fm
10
B♭m
3
B♭m
6
B♭m
10
B♭m
3
B♭m
8
B♭m
11

One of the many uses of triads is in harmonizing simple tunes like Christmas carols. The same principles used in harmonizing a tune like "Greensleeves" apply for carols, except that very few extensions or altered chords are used, due to the nature of the sound desired. Mainly simple chords are used in the carols (almost all majors and minors, and an occasional 7th, +, or ^{o}). Taking the basic melody and chords from printed music, a simple arrangement might look like this: The tune used will be:

O COME ALL YE FAITHFUL

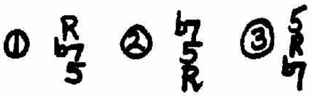

G G G G D D G D G G G D G Em Bm A7 D G D G D A7 D D G C G D7 G
‡
D G Em A D A7 D C G D G Am G G G G D G C G D G C G Am A7 D G C G D G

Notes

1) When a 7th chord triad is desired, it is usually best to leave out the root or 5th. Since this song is using CLOSED triads (so far), the only voicings possible for it are:

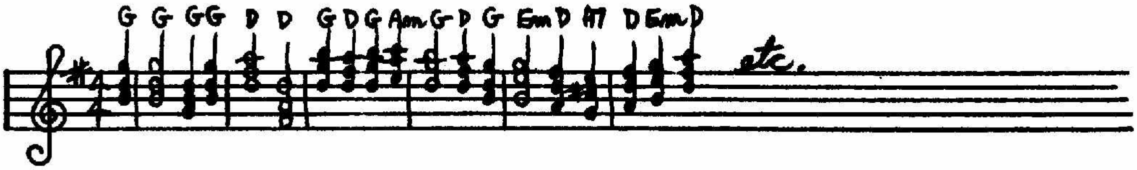
from the top note down → ① R b7 3 ② b7 5 3 ③ 5 3 b7 ④ 3 R b7

and occasionally when you
leave out the 3rd



‡ This melody note could be left unharmonized (like the one in the 2nd to the last measure), due to the speed with which the next chord must be played.

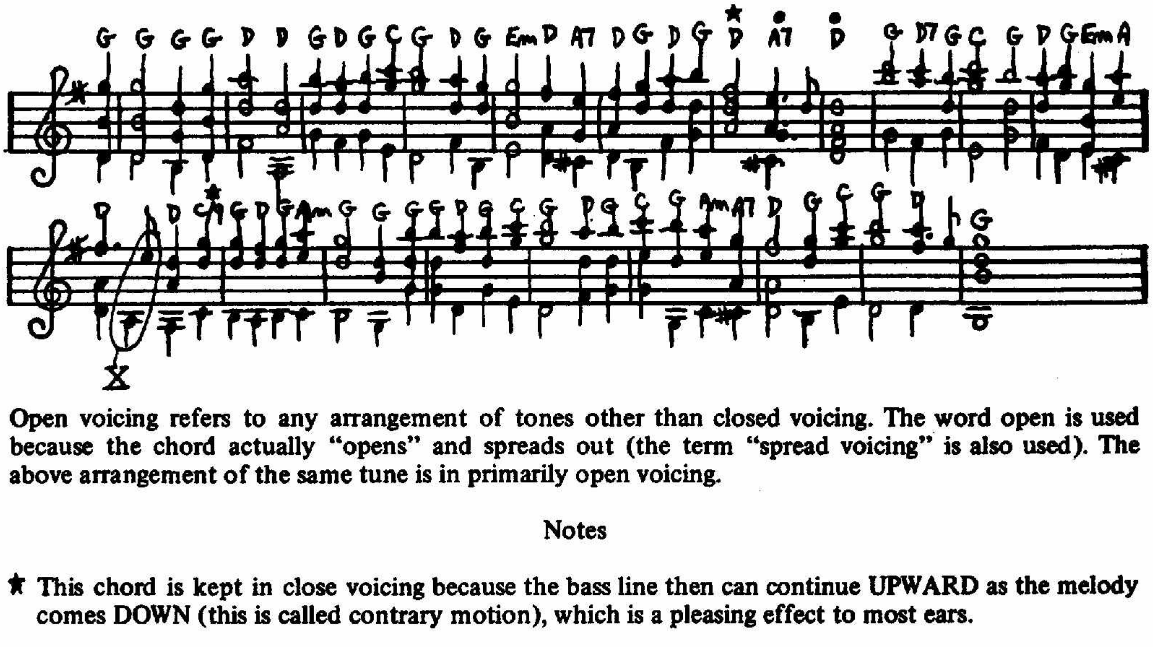
Using the Relative Minor & Major Chords



Compare the changes made with the 1st arrangement. The relative chords have been substituted above as before in "Greensleeves". The technique of substituting the relative minor is often used on the IV chord of a key; so in the above example Am replaces C which is the IV chord of the key of the song, G. However, the Em in measure 6 doesn't seem to be replacing the IV chord; it would seem that it is replacing the I chord, G. This is only true from one viewpoint, which actually is not the wisest one in this case. Notice that in the measure preceding the circled Em the chord A7 appears after D. This A7 has a note which is not in the key of G (C#), and actually the key has temporarily switched to D, which has the C# in it. Think of the A7 as the V7 chord of the new key, and for the next 3 measures, you are in the key of D. In any song, you should get used to looking and listening for the temporary key changes, as they happen often. Just remember that the V7 (or sometimes V) chord almost always is the chord that "sets up" the new key; without some form of V7 or V chord, the transition to a new key sounds awkward. (Also see page 66 on the cycle).

Here is another arrangement of the same tune, but this time with fuller sounding chords:

Open Voiced Triads


G G G G D D G D G C G D G Em D A7 D G D G D A7 D G D7 G C G D G Em A
D D C G D G Am G G G G D G C G D G C G Am A7 D G C G D G
X

Open voicing refers to any arrangement of tones other than closed voicing. The word open is used because the chord actually "opens" and spreads out (the term "spread voicing" is also used). The above arrangement of the same tune is in primarily open voicing.

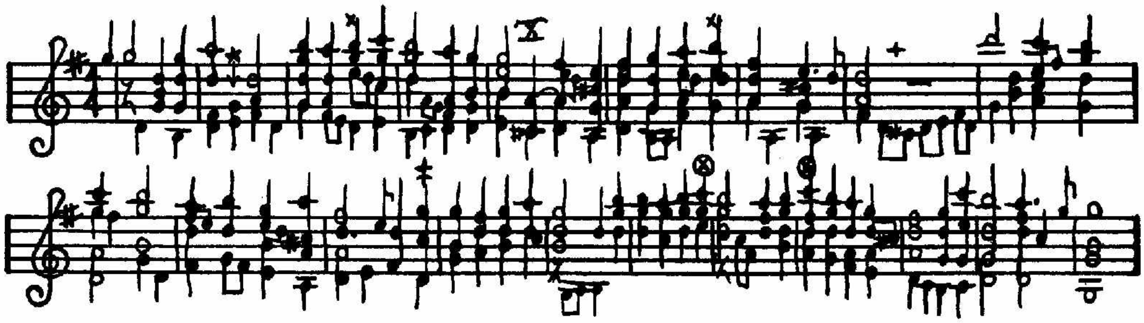
Notes

★ This chord is kept in close voicing because the bass line then can continue UPWARD as the melody comes DOWN (this is called contrary motion), which is a pleasing effect to most ears.

- The A7 and D chords here have 4 voices. The D chord is the last chord in the phrase, and WHEN USING OPEN TRIADS, THE ROOT IS USALLY PUT IN THE BASS FOR THE LAST CHORD IN A PHRASE: since the melody is also the root, in order to have all the tones of the major chord in the chord, you would have 4 tones – 2 roots, the 5th, and 3rd. If you wanted a triad, you could leave out the 5th and keep the 2 roots and 3rd.
  The A7 chord has 4 voices because it leads smoothly to the 4 note D chord; this is not necessary, but more a matter of taste.

✱ C'add 9 (no 3rd) for the C chord.
⌶ The E melody note, instead of being harmonized is left alone, and one of the most important notes of the chord that would be there normally (A7) is used in the bass preceding it.

To make triads into 4 note chords, you may double a root, 3rd, or 5th. For 7th chords, you usually just play $135^{b}7$, although you could leave out the root or 5th (occasionally the 3rd), and double one of the remaining notes. So here is the same tune with quite a few 4 note chords and some other goodies:



Notes

★ These 2 notes (G+$\overset{E}{F}$) are used as passing notes between the notes in the 2 D chords; note that there are three 3rd intervals in a row;
⌶ This partial A chord is used as a passing chord between Em and D; this will work nicely here, because it makes the IIm (Em) I (D) progression into a IIm V I progression, which you should know by now, is a common sound.
x G6 instead of G.
+ This run just uses notes of the scale of the chord (D major).
‡ D7 sus instead of C or C add 9 is just an ear thing – no real rules, possibly that D is V and C is IV, and they are closely related, but that is really hunting for a reason.
⊗ D7 instead of C – again no real rule – just putting in the V7 for the IV chord where it sounds good.

A thorough study of this last arrangement should help you in constructing your own arrangements of other tunes. If you just learn how to play this song without analyzing it, you have learned just that – one song. Also, as mentioned elsewhere, studying the music of J.S. Bach, Handel, and D. Scarlatti is an excellent thing to do for the serious musician.

Also, you might go back and rearrange "Greensleeves" with different types of triad treatments now.

Section 16

Fundamental Harmonies of Scales

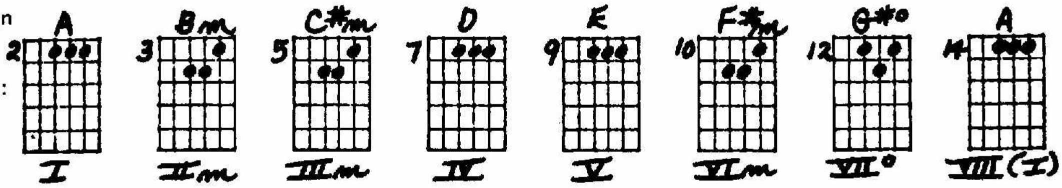
Every scale has fundamental harmonies or chords that can be built from it. Knowing these harmonies is essential to understanding chord relationships, since many songs and progressions are based on them.

We will use any major scale first as an example. Take the root, put the 3rd above it and the 5th above the 3rd; you now have the first basic harmony or chord of the major scale. THE NEXT CHORD IS DERIVED BY MOVING EACH TONE IN THE 1ST CHORD UP TO THE NEXT TONE IN THE SCALE. You will now have the 2, 4, and 6. The next chord is derived in the same way, and will be the 3, 5, 7. Next is 4, 6, 8 (remember 8 is the same letter name as 1); next 5, 7, 9 (2); and so on until you reach the 8th chord which will contain the same notes as the 1st chord, but an octave higher.

The names of the chords are derived BY THINKING OF THE BASS NOTE OF EACH CHORD AS THE ROOT; they are as follows for any major scale: I major IIminor IIIminor IVmajor Vmajor VIminor VIIdiminished VIIImajor. For the A major scale (A B C$^{\#}$ D E F$^{\#}$ G$^{\#}$ A) the chords would be A Bm C$^{\#}$ m D E F$^{\#}$m G$^{\#o}$ (the diminished triad 1^{b}3^{b}5, not the full dim.7 chord) A.

The 3 note diminished triad is actually the 4 note diminished 7th chord without the 6th tone. An important point is that a VII diminished triad sounds like a dominant 7th chord whose root is 2 whole steps lower. Example: G$^{\#o}$ sounds like E7. This is because they have the same notes, except that the E7 also has an E note besides the G$^{\#}$ B D.

Here is an example in the key of A:

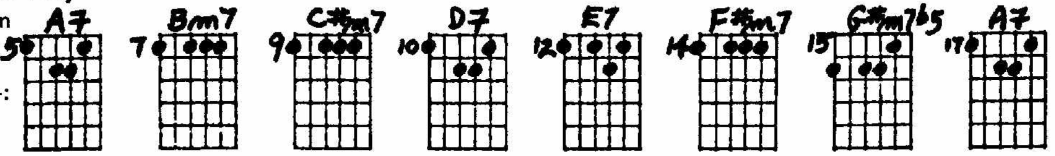


4 Note Harmonies

The 3 note harmonies can be extended to 4 note ones in the following manner: to the 1st chord (1 3 5) add the 7th, then continue up in sequence, that is, to the next chord (2 4 6) add the 8th, to the next chord (3 5 7) add the 9th, etc.

You would then have the following chords: I7 IIm7 IIIm7 IV7 V7 VIm7 VIIm7^{b}5 VIII7. Again, in the key of A, they would be: A7 Bm7 C$^{\#}$m7 D7 E7 F$^{\#}$m7 G$^{\#}$m7^{b}5 A7.(Notice that the interval between each successive note in each chord is a 3rd or a ^{b}3rd. Example: The 1st chord has 1 3 5 7. The 3rd is a 3rd interval from the root, the 5th is a 3rd interval from the 3rd, the 7th is a 3rd interval from the 5th.)

Here is an example starting from A7:



The last few chords here should be moved over a set of strings to make them more playable. You would be wise to build these fundamental chords now, starting from all of the major triads and 7 chords that you know. Some forms will not be practical for the hands, but many will and these chord scales will definitely help you to learn the neck better, so . . . You may use the same logic with any scale to build the fundamental chords that you used with the major scale. Some of the more popular ones are listed below:

SCALE	TONES	3 NOTE CHORDS	4 NOTE CHORDS
Harmonic minor	(1,2,^{b}3,4,5 ^{b}6,7,8)	Im II^{o} ^{b}III+ IVm V ^{b}VI VII^{o} VIIIm	Im7 IIm7^{b}5 ^{b}III7+ IVm7 V7 ^{b}VI7 VII^{o} VIIIm7
Natural minor	(1,2,^{b}3,4,5 ^{b}6,^{b}7,8)	Im II^{o} ^{b}III IVm Vm ^{b}VI ^{b}VII VIIIm	Im7 IIm7^{b}5 ^{b}III7 IVm7 Vm7 ^{b}VI7 ^{b}VII7 VIIIm7

Melodic minor	(1,2,b3,4,5 6,7,8)	Im IIm bIII+ IV V VI° VII° VIIIm	~~Im7~~ IIm7 bIII7+ IV7 V7 VIm7b5 VIIm7b5 VIIIm~~7~~
Dorian minor	(1,2,b3,4,5 6,b7,8)	Im IIm bIII IV Vm VI° bVII VIIIm	Im7 IIm7 bIII7 IV7 Vm7 VIm7b5 bVII7 VIIIm7
Mixolydian (dominant 7th)	(1,2,3,4,5 6,b7,8)	I IIm III° IV Vm VIm bVII VIII	I7 IIm7 IIIm7b5 IV7 Vm7 VIm7 bVII7 VIII7

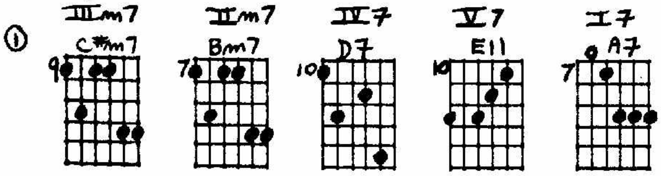
There are other good scales than these, so you might look into the matter.
IMPORTANT: The notes and chords of these scales are the same: C major = G mixolydian = A natural minor = D dorian minor

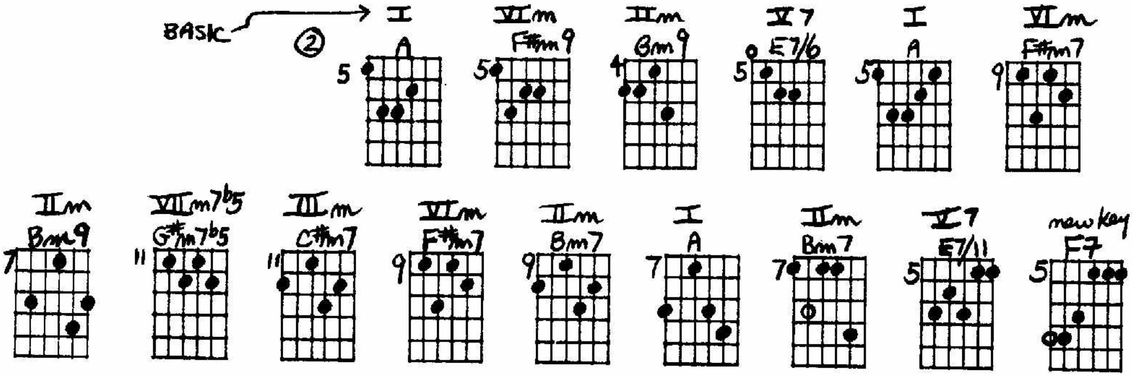
Some Common Chord Progressions

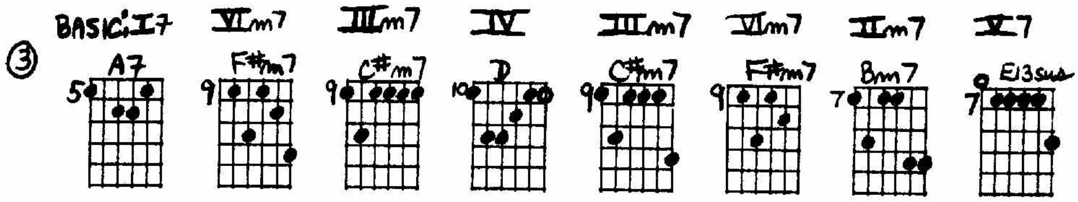
These chord progressions will attempt to illustrate how some of the harmonies of each of the above scales are used together; some extensions will be used as subtitutes.

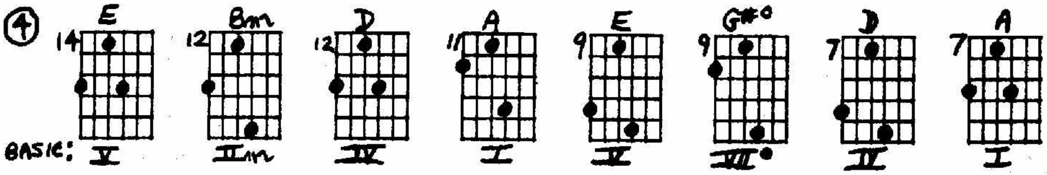
Major Scale Progressions (Key of A)

Do not play these progressions "dry" or "stiff"; put a lot of feeling into them, and they will sound much better. BASIC:


①
IIIm7
C#m7
9
IIm7
Bm7
7
IV7
D7
10
V7
E11
10
I7
A7
7


BASIC
②
I
A
5
VIm
F#m9
5
IIm
Bm9
4
V7
E7/6
5
I
A
5
VIm
F#m7
9
IIm
Bm9
7
VIIm7b5
G#m7b5
11
IIIm
C#m7
11
VIm
F#m7
9
IIm
Bm7
9
I
A
7
IIm
Bm7
7
V7
E7/11
5
new key
F7
5


BASIC: I7
③
A7
5
VIm7
F#m7
9
IIIm7
C#m7
9
IV
D
10
IIIm7
C#m7
9
VIm7
F#m7
9
IIm7
Bm7
7
V7
E13sus
7

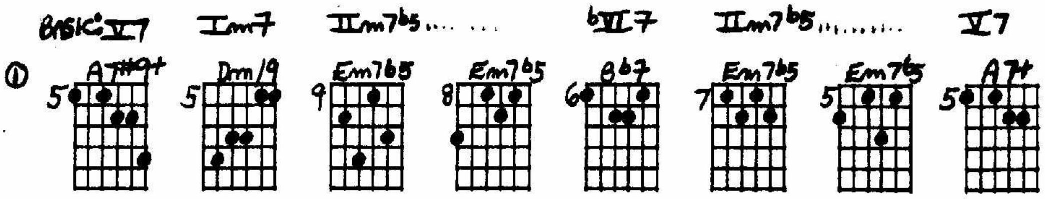

④
E 14
Bm 12
D 12
A 11
E 9
G#° 9
D 7
A 7
BASIC: V IIm IV I V VII° IV I

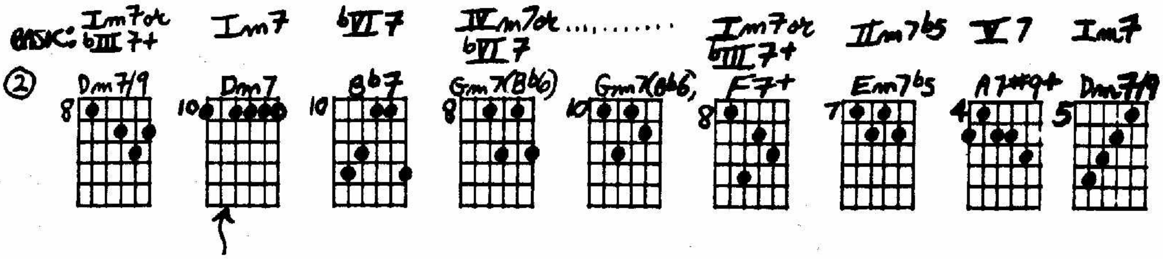
Harmonic Minor Progressions (Key of Dm)

When using chord progressions with the harmonic minor scale, you may substitute a plain minor for the Im7 if you are going to use a 4 note chord; just use a minor with a doubled root, ♭3rd or 5th. The reason for this is that the m7 is a pretty weird chord to use as a I chord to most ears. You may also use other chords instead of the Im7, but when you do, you must realize that if someone were soloing over you, you might be forcing him to change scales. For example, for the Im7 you may use the Im6 type, but if someone were soloing while you were playing that chord, he would have to think ♮6 instead of a ♭6 every time you hit it. In other words, the soloist would most likely be playing notes of the harmonic minor lead scale against the harmonic minor chords, but when the m6 type chord is played, he would have to raise the 6th tone in his scale, which would then make it the melodic minor; on that m6 type chord, a dorian minor scale could also be played, since it too contains the notes of the chord (1♭356).

Anyway, be careful with chords & scale relationships in general.

Harmonic Minor Progressions (Key of Dm)


BASIC: V7 Im7 IIm7♭5........ ♭VI7 IIm7♭5.......... V7
①
A7#9+ 5
Dm/9 5
Em7♭5 9
Em7♭5 8
B♭7 6
Em7♭5 7
Em7♭5 5
A7+ 5

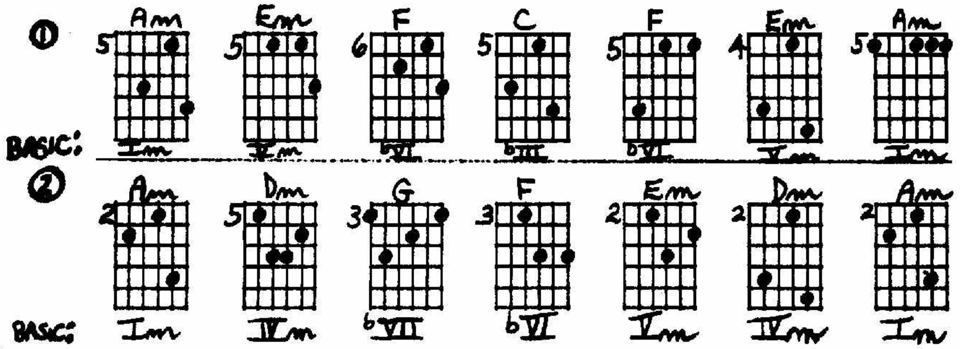

BASIC: Im7 or ♭III7+ Im7 ♭VI7 IVm7 or ♭VI7.......... Im7 or ♭III7+ IIm7♭5 V7 Im7
②
Dm7/9 8
Dm7 10
B♭7 10
Gm7(B♭6) 8
Gm7(B♭6, 10
F7+ 8
Em7♭5 7
A7#9+ 4
Dm7/9 5

This chord is not
really in the scale.

Now, go back and play the 1st progression in the book on page 1 ; this is in the key of E♭m using some chords of the harmonic minor, and then modulating to the key of B♭. Using the chords of a scale can be referred to as being in the TONAL CENTER (The word TONAL CENTER is often used instead of KEY) of that scale; like the tonal center of E♭ harmonic minor, tonal center of A major, tonal center of A mixolydian, etc.

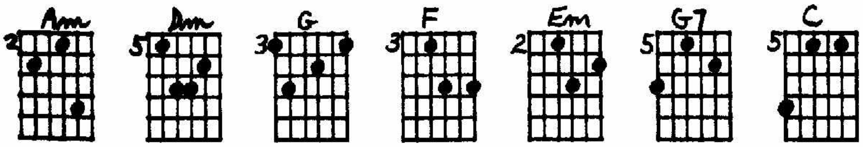
Natural Minor Progressions (Key of Am)

Most chord progressions based on the harmonies of this scale use the 3 tone chords instead of the 4 tone chords. As you should remember, you may double one of the 3 notes in the chord to give it 4 notes, even though it still has only 3 different TONES.


①
Am 5
Em 5
F 6
C 5
F 5
Em 4
Am 5
BASIC: Im Vm bVI bIII bVI Vm Im
②
Am 2
Dm 5
G 3
F 3
Em 2
Dm 2
Am 2
BASIC: Im IVm bVII bVI Vm IVm Im

Remember from page 87 that the chords of 4 scales are actually the same, and that Am (natural) and C major were among these. You could change the above progression to make it end in the tonal center of C, even though the chords would be the same as those of the A natural minor. Remember to modulate or change tonal centers, you usually need the IIm7 V7 I. When using 3 note chords, you may also modulate or change tonal centes by playing (1) IV V I (of the new key); (2) IV VII° (this sounds like V7) I; (3) IIm V I; (4) IIIm V I; (5) VIm V I, and others too. There is far more leeway with triads than with 4 note chords, as far as modulating goes.

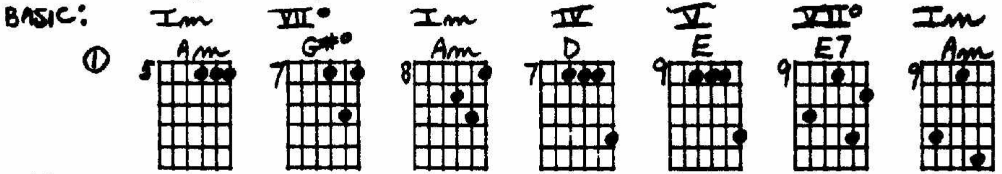
Progression 2 ending in C tonal center

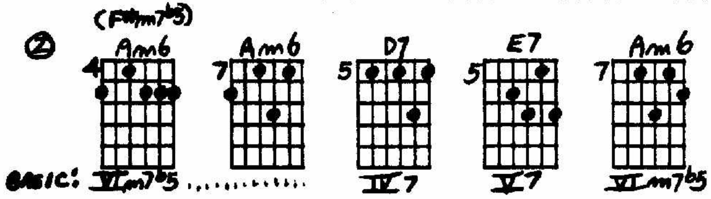

Am 2
Dm 5
G 3
F 3
Em 2
G7 5
C 5

Remember that G7 and B° triads are closely related and can be used for each other when it sounds good to you.

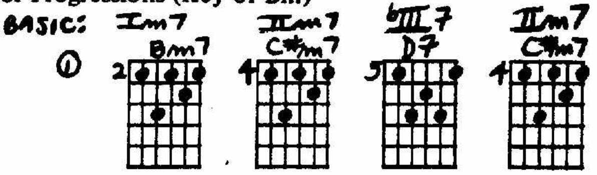
Melodic Minor Progressions (Key of Am)

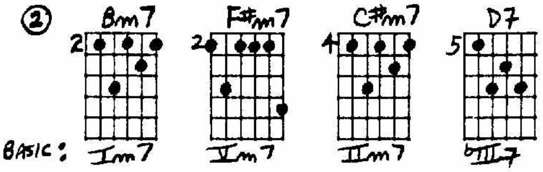
The chord progressions of this scale are also quite often of the 3 note variety. Notice that F#m7b5 is also Am6, so it would be a good Im type chord.

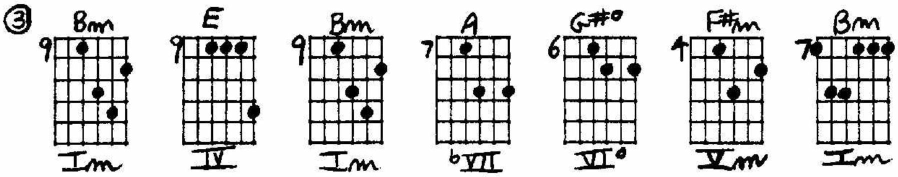

BASIC: Im VII° Im IV V VII° Im
①
Am 5
G#° 7
Am 8
D 7
E 9
E7 9
Am 9


②
(F#m7b5)
Am6 4
Am6 7
D7 5
E7 5
Am6 7
BASIC: VIm7b5 .... IV7 V7 VIm7b5

Dorian Minor Progressions (Key of Bm)

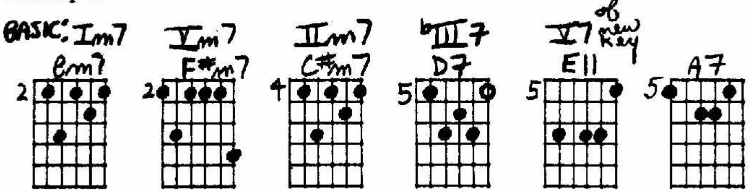

BASIC: Im7 IIm7 bIII7 IIm7
①
Bm7 2
C#m7 4
D7 5
C#m7 4


②
Bm7
F#m7
C#m7
D7
2
2
4
5
BASIC:
Im7
Vm7
IIm7
bIII7


③
Bm
E
Bm
A
G#°
F#m
Bm
9
9
9
7
6
4
7
Im
IV
Im
bVII
VI°
Vm
Im

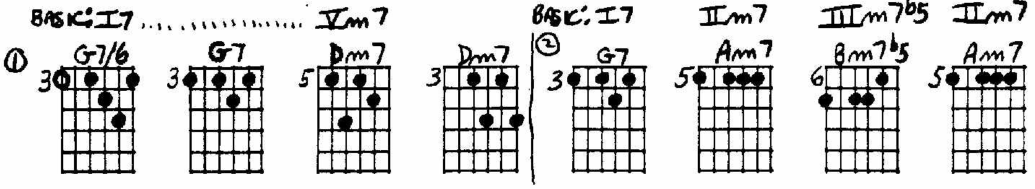
Notice that the 2nd progression could end in the tonal center of A major (remember A major = Bm dorian since C major = Dm dorian)

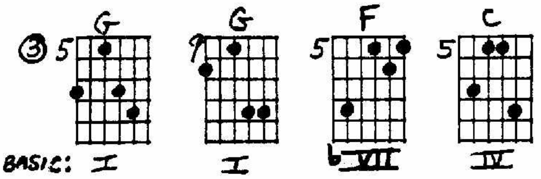
Example:


BASIC:
Im7
Vm7
IIm7
bIII7
V7 of new key
Bm7
F#m7
C#m7
D7
E11
A7
2
2
4
5
5
5

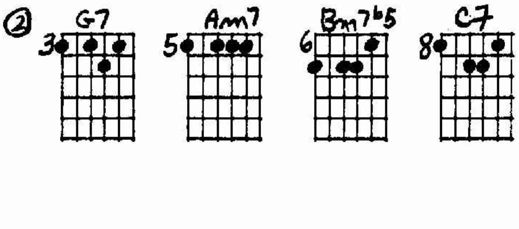
The V7 (E11) makes it sound like the key is A and the other chords were just building up to it.

Mixolydian Chord Progressions (Key of G7)


BASIC: I7 .... Vm7
①
G7/6
G7
Dm7
Dm7
3
3
5
3
BASIC: I7
IIm7
IIIm7b5
IIm7
②
G7
Am7
Bm7b5
Am7
3
5
6
5


③
G
G
F
C
5
7
5
5
BASIC:
I
I
bVII
IV

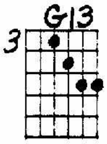
The harmonies of this scale seem to lend themselves towards the blues and rock field more than the other scales. Notice that the 2nd progression could progress to the IV chord and then it would sound like the tonal center of C. Keep in mind, once again, that the chords in the keys of C major, G mixolydian, Am (natural), and Dm (dorian) are all the same.


②
G7
Am7
Bm7b5
C7
3
5
6
8

Section 17

Other Chords Built from Scales

There are many other chords besides the fundamental ones that can be built from scales. ANY CHORD THAT CONSISTS OF NOTES IN A CERTAIN SCALE CAN BE SAID TO BE DERIVED FROM THAT SCALE.
Example:

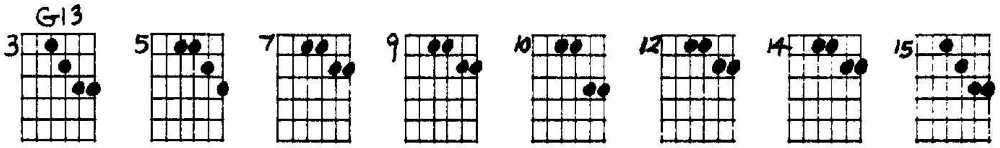


G 13 has the notes F B E A – all of these are contained in the G mixolydian scale, C major scale, A natural minor scale, and D dorian minor scale; so you could say that this chord is derived from any or all of these scales.

However, more than likely, you would find it easier to just think of G 13 as being derived from the G mixolydian scale, and in the back of your mind remember that the G mixolydian is the same as the other scales.

You may build a chord scale starting from this G 13 using the same procedures as with the fundamental chords; that is, move each note in the chord up to the next note in the scale for each successive chord.

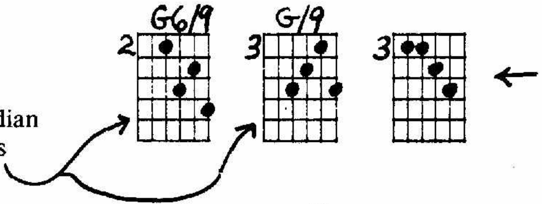
Starting from G 13 you would get the following chords:



If you were to try to name these chords in order (like G13, Am9+, Bm($^{b}9$) +, ~~C13~~, Dm13, etc.) you would find some chords don't really sound as if they should be named after the roots that have been assigned in this arrangement. Like the 3rd chord here could more easily be called F 6/9 than Bm($^{b}9$)+. But actually most musicians don't bother to name the chords in scales like this, but instead think of them as chords based on a certain tonal center, in this case G 13, or to simplify it even more, the G mixolydian scale. So you could try fitting these chords in place of a G7, but use your ears to decide when it is appropriate.

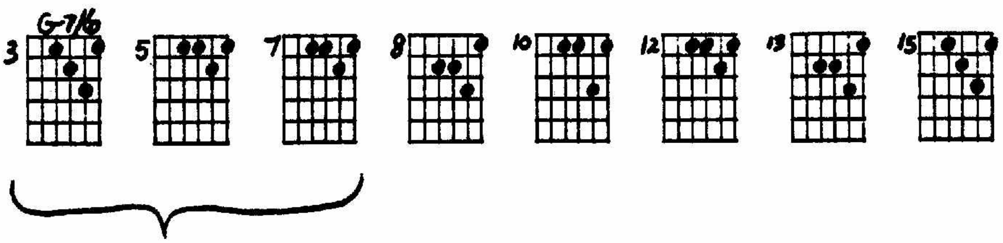
Try building chord scales, starting on any chord in a scale, for some different sounds. Examples:

Use either the
G major or G mixolydian
scales for these chords



try the A harmonic or natural minors with this one

Some chords in these scales may be hard to finger, and some may not sound good, but there may be part of a scale that is worthwhile, rather than the whole scale. Example:



This part could be used pretty effectively.

Section 18

Blues Progressions

Blues progressions form the basis for so much music now in existence that a knowledge of them if very important to the well-rounded musician. The term blues means many different things to many different people; so a definition is hard to come by, but in this book, it refers to any 12 bar (measure) progression. (A bar in this case refers to a unit of time of 4 beats or counts).

The blues can range from an extremely simple progression to a pretty complex series of chords. Both extremes and the shades in between will be covered in the progressions to follow. All these progressions are given in the key of C. Naturally they can be moved or "transposed" to other keys. With each progression, the basic chords are given, and then below are given some examples of substitute chords that could be used. These inversions are just SUGGESTIONS, and are by no means the only ones that will work; so you should EXPERIMENT. There are so many inversions given in the front of the book that you should be able to make literally HUNDREDS of progressions out of just ONE basic one.

When choosing the inversions, pay particular attention to the melody note (the highest pitch – the top note) in each chord. Make sure that these notes make nice melodies together. Actually, you should be watching for smooth voice leading (as was discussed in section 13) wherever possible.

To make these progressions fun to play, it is suggested that you play them with as much feeling as possible. There are many nice rhythms you could use, such as "funky rock type", shuffles or swing feels, latin, bossanova, slow blues, etc. If these rhythms are foreign to you, it is suggested that you make the acquaintance of a musician who knows these things, and is willing to teach them to you. If you do not put any feeling into the progressions, they will be boring, and you will probably lose interest; put feeling into them, and they will be enjoyable.

Some progressions cannot be played with a pick only; you must use your fingers as discussed on page 7.

Some of the chords will not be easy, but with PRACTICE, they can all be achieved. Do not give up on a hard chord, but continue to practice it, and results will come.

Most of these progressions are among the accepted ones used by musicians who play blues. The 1st 2 progressions are not really "bluesy" sounding, because they are based on simple major chords and the blues sound is usually associated with the dominant 7th family.

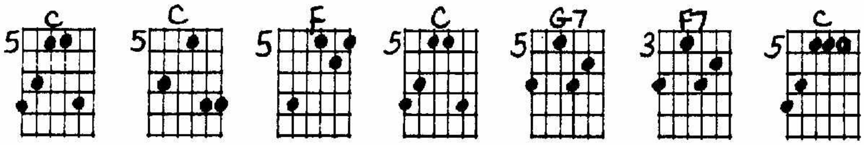
Ideas from the different progressions may be mixed up; in other words, you might like a chord change from one progression with part of another progression, or you might like to try a different extension of alteration than the one given. (examples: C 13 instead of C 9 or C7+ instead of C7#9 or whatever . . .) Do anything that sounds good to you, but try to understand why you are doing it.

Another point to notice is that in 99.9999% of all cases, some form of I chord will be in bar 1 to start the progression, and some form of a IV chord will be in bar 5. The other measures will vary enormously.

Progression 1:

Measure Numbers	1	2	3	4	5	6	7	8	9	10	11	12
Basic Chords	C	C	C	C	F	F	C	C	G7	F7	C	C

Inversion
Suggestions



the 10th measure often stays on G7 in a progression such as this. Also the 12th measure could be G7 instead of C.

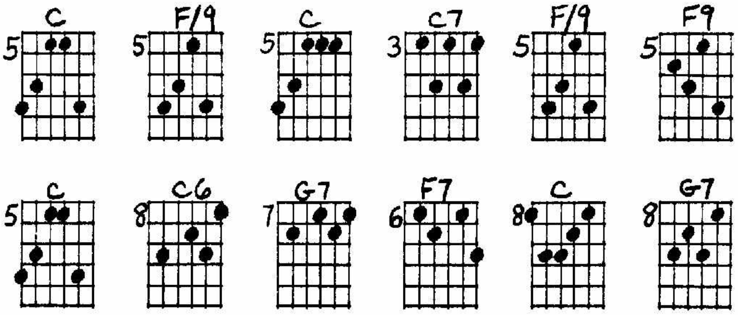
This progression is extremely basic sounding, but is used for the basis of many simple tunes; so it might be useful to know it. One thing that makes it sound so basic is that no extensions, alterations, or substitutions are used, just the plain chords.

Progression 2:

Measure No's.	1	2	3	4	5	6	7	8	9	10	11	12
Chords	C	F	C	C7	F	F7	C	C	G7	F7	C	G7

Play these chords for
4 beats each

Inversion
suggestions



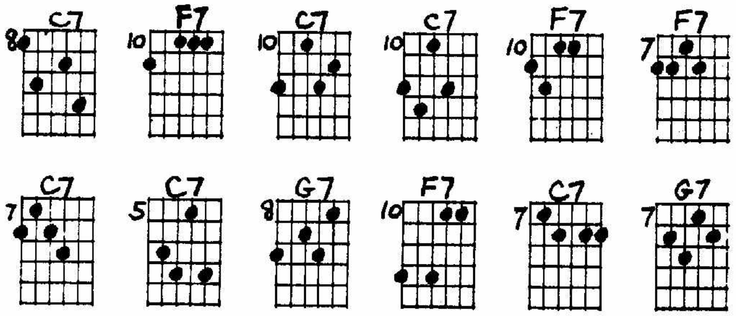
Another very basic progression that still doesn't sound very bluesy, but it has some pleasing features of a different nature. The F add 9 is pretty much a universally pleasing sound when used in the above manner. Also, notice in measures 9 and 10, the upward movement of the melody against the downward movement of the chords (this is contrary motion – see section 15). Getting back to the F add 9, one reason it sounds good here is the COMMON TONE on top of the C chord and the F add 9 chord (G). It serves to unify the 2 chords.

Progression 3:

Measure No.'s	1	2	3	4	5	6	7	8	9	10	11	12
Basic Chords	C7	F7	C7	C7	F7	F7	C7	C7	G7	F7	C7	G7

All chords- 4 beats each

Inversion Suggestions


C7
8
F7
10
C7
10
C7
10
F7
10
F7
7
C7
7
C7
5
G7
8
F7
10
C7
7
G7
7

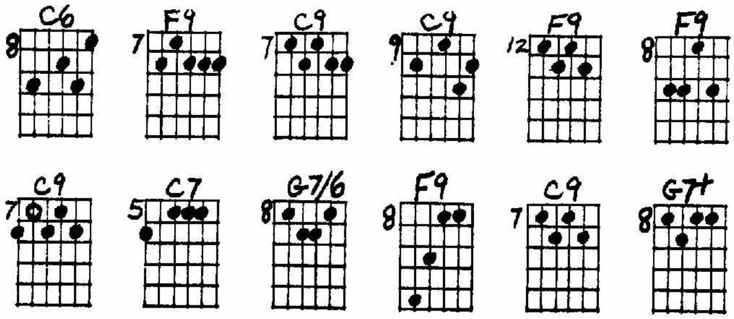
This type of progression is commonly used by rock players and can be the basis for some very pleasing chord substitutions like those of the next few progressions.

Progression 4:

Measure No.'s	1	2	3	4	5	6	7	8	9	10	11	12
Basic Chords	C	F7	C7	C7	F7	F7	C7	C7	G7	F7	C7	G7

All chords 4 beats

Inversion Suggestions

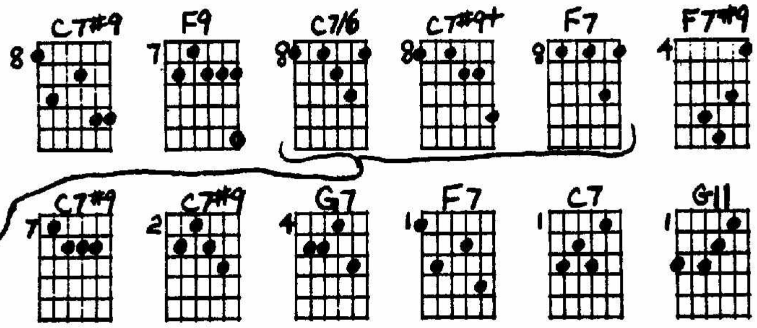

C6
8
F9
7
C9
7
C9
9
F9
12
F9
8
C9
7
C7
5
G7/6
8
F9
8
C9
7
G7+
8

This progression has a much bluesier sound to most ears due to the abundance of 9th chords; also notice the 1st measure basic chord is the major chord instead of the dominant 7th; so a major 6th chord is substituted. If any of the substitutions puzzle you, go back and reread section 11 on chord substitutions.

Progression 5:

Measure No.'s	1	2	3	4	5	6	7	8	9	10	11	12
Basic Chords	C7	F7	C7	C7	F7	F7	C7	C7	G7	F7	C7	G7

Inversion Suggestions

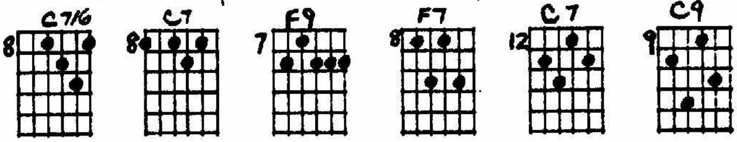

C7#9
8
F9
7
C7/6
8
C7#9+
8
F7
9
F7#9
4
C7#9
7
C7#9
2
G7
4
F7
1
C7
1
G11
1

If these 3 chords give you trouble, see section 3 on right hand technique. You will find that if you bar these chords with the 1st finger, you may use some of the plucking techniques described there.

Progression 6:

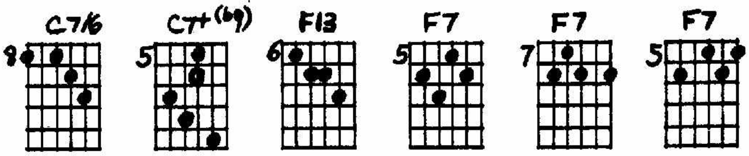
Measure No.'s	1	2	3
Basic Chords	C7	F7	C7

Inversion Suggestions

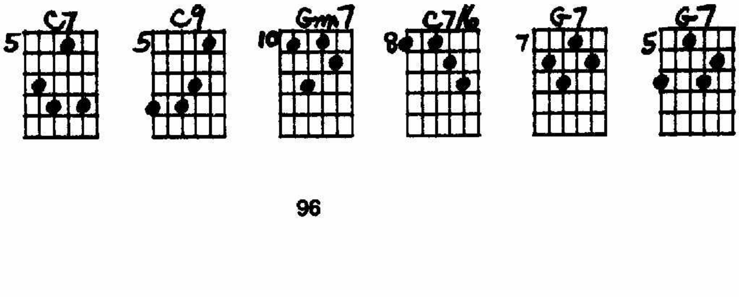

C7/6
8
C7
8
F9
7
F7
8
C7
12
C9
9

Measure No.'s	4	5	6
Basic Chords	C7	F7	F7

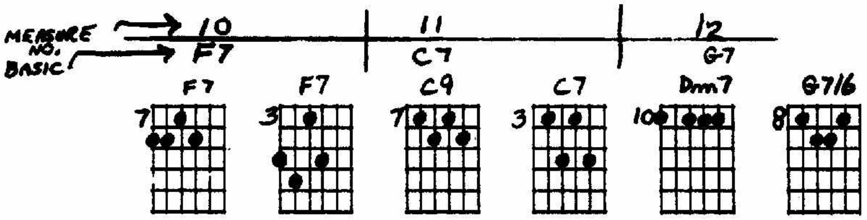
Inversion Suggestions


C7/6
9
C7+(b9)
5
F13
6
F7
5
F7
7
F7
5

	7	8	9
	C7	C7	G7


C7
5
C9
5
Gm7
10
C7/6
8
G7
7
G7
5

continued →

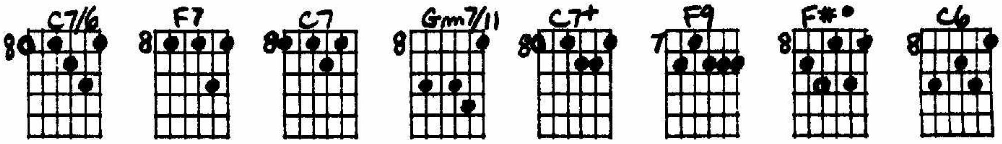


This progression is very similar to the last 2, but there are 2 chords in every measure. When this occurs, you may divide the beats equally (that is, 2 beats for each chord) or unequally (3 beats on the 1st one and 1 beat on the last one; 1 beat on the 1st one and 3 beats on the last one; 3½ beats on the 1st one and ½ beat on the last one, etc.). If you are playing at a slow tempo, you may find it boring to just play 1 chord in every measure; however at an extremely fast tempo, you may find it very difficult to switch to more than 1 chord per measure, so experiment with the above progression at different tempos.

Progression 7:

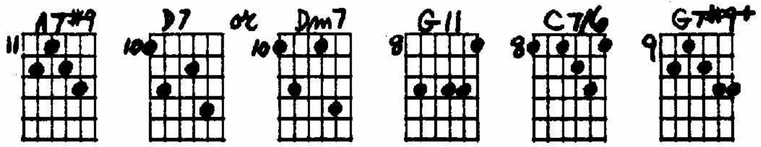
Measure No.'s	1	2	3	4	5	6	7
Basic Chords	C7	F7	C7	C7	F7	F#° (C°)	C

Inversion Suggestions



Measure No.'s	8	9	10	11	12
Basic Chords	A7	D7 or Dm7	G7	C7	G7

Inversion Suggestions



This progression has some interesting features that were not contained in the others:

a. The F$^{\#o}$ in measure 6 – often a $^{\#}$IV^{o} is used as a passing chord following a IV or IV7 type chord and then leading to a I or I7 type chord.

b. The A7 type chord in measure 8 – this could also be a VIm7 type chord instead (Am7 Am7/11 Am9 Am7^{b}5, etc.)

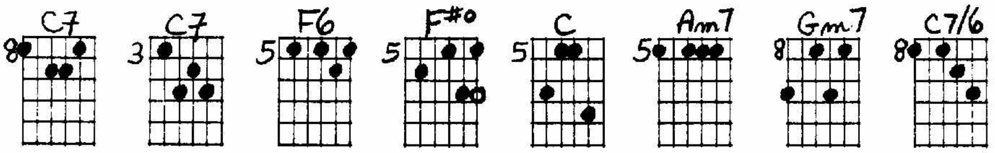
c. The D7 or Dm7 type chord in measure 9 – if the D7 is used the Dm7 could be used in the second ½ of the same measure; (actually the reverse could be done too; that is Dm7 than D7 in the same measure).

d. Note the pleasing sound of the G11 in measure 10; remember that the 3rd may be left out of this chord as well as either the root or 5th.

e. Notice that from measure 8-11, the chords' roots move in 4ths (A to D to G to C), or stated another way, these chords follow the cycles of 4ths.

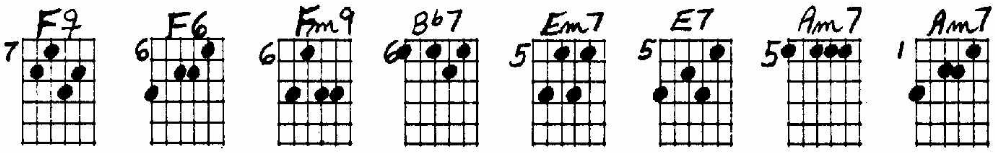
Progression 8: Measure No.'s	1	2	3	4
Basic Chords	C	F F#o	C	C7

Inversion Suggestions

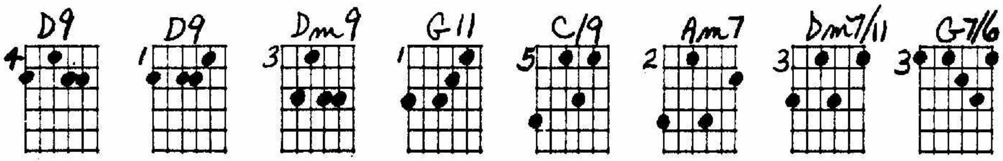


Measure No.'s,	5	6	7	8
Basic Chords	F	Fm	C	Am

Inversion Suggestions



	9	10	11	12
	D7	G7	C	G7



This is another type of blues progression with a softer quality that is announced right away with the use of I7 chords. There have been quite a few songs written using large portions of this progression. Some other points of interest are:

a. The previously mentioned IV to $^{\#}IV^{o}$ is here used in the space of only one measure instead of two as in progression 7.

b. Am7 in measure 3 can be explained by the synonym Am7 = C6 (See page 12).

c. F9 and F6 in measure 5 instead of the usual dominant type chords again give the prettier, softer sound.

d. Fm9 and $B^{b}7$ in measure 6; IVm is sometimes used following a IV major type chord, and when this happens, you may treat this IVm as a IIm, and follow it with its companion V7. In this case, since the IVm was Fm, if you think of it as the IIm, then the V7 would be $B^{b}7$.

e. The IIIm7 and/or III7 chord are used often in place of the I chord in measure 7 of blues progressions. Measure 7 could also have 2 beats of a C or C7 type chord, and then 2 beats of either an E7 or Em7 type chord. Examples: C7 Em7 or C7 $E7^{\#}9$ or C6 $E7^{b}9^{\#}5$, etc.

f. Am7 and D9 (measures 8 and 9) similar to progression 6.

g. The last 4 chords in this progression (measures 11 and 12) are called a "turnaround". A TURNAROUND IS ANY SERIES OF CHORDS USED IN PLACE OF AN EXTENDED DURATION OF THE TONIC CHORD. This usually occurs at the end of a phrase or at the end of a song, although turnarounds are also effective introductions. The last chord of a turnaround is almost always a V7 type or it ♭5th (♭II).

Confusingly enough, the term "turnaround" is used by rock and 3 chord blues oriented people to mean the last 4 measures of the 12, but in this book, turnaround will mean the previously stated definition.

Some of the nearly infinite number of turnarounds are listed here. You may combine ideas from one turnaround with those of another, if they sound good to you. As usual, apply the substitution principles to these turnarounds if you wish, because they may sound boring if they are played straight as 7th chords, m7th chords, etc.

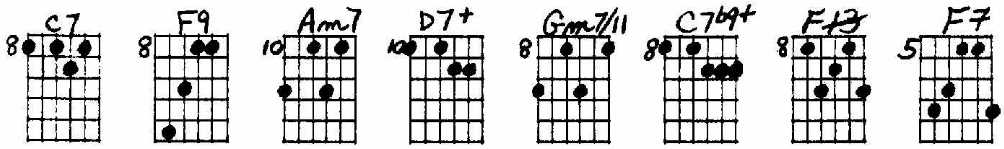
1) I7 VIm7 IIm7 V7
2) IIIm7 VI7 IIm7 V7
3) III7 VIm7 IIm7 ♭II7
4) III7 VI7 II7 V7
5) I7 VIm7 ♭VI7 V7
6) I ♭III7 IIm7 V7
7) IIIm7 ♭III7 IIm7 ♭II7
8) IIIm7 ♭III7 ♭VI7 V7
9) I ♭III° IIm7 V7
10) I ♭II° IIm7 V7
11) I IIIm7 IV7 V7
12) ♭VII7 VI7 ♭VI7 V7
13) I7 IV7 II7 V7
14) I7 ♭VII7 IV7 V7
15) I IIm7 II7 V7
16) I II7 IV7 V7
17) I II7 IIm7 V7
18) ♭III7 ♭VI7 IIm7♭5 V7
19) I7 I7 IIm7 V7
20) I ♭VI7 IIm7 V7
21) II7 ♭VI7 IIm7 V7
22) ♭II7 ♭VI7 IIm7 V7
23) I7 ♭VI7 ♭II7 V7
24) I7 ♭VII7 ♭VI7 V7
25) ♭VI7 ♭II7 IIm7♭5 V7

Note: Try playing a turnaround in measures 1 and 2 of a blues progression – the 1st chord should be a 1 chord. Example: Measure 1 2
C7 Am7 Dm9 G7/6
" " " "

Progression 9:

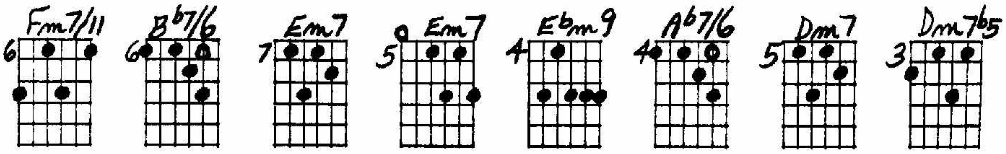
Measure No.'s	1	2	3	4	5
Basic Chords	C7	F7	Am D7	Gm C7	F

Inversion Suggestions

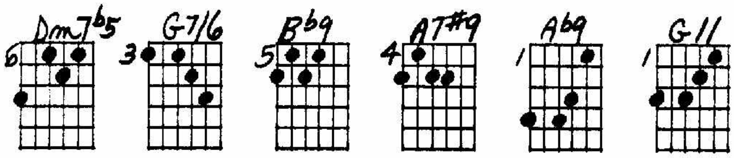


Measure No.'s	6	7	8	9
Basic Chords	Fm	Em7	E♭m7	Dm7

Inversion Suggestions



10	11	12
G7	C	G7



Points worth noting in this progression:

a. Measures 3 and 4 are actually a turnaround leading to the F chord(s). This can be thought of as VI II V I of C or III VI II V of F. The first 3 of these chords could also have been of the m7 family, but the last one should be of the dominant family to lead the ear to the F chord.

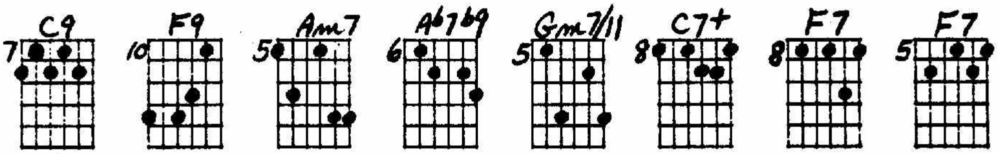
b. Measure 8(E^{b}m7 A^{b}7). This can also be looked at in different ways – either the ^{b}IIIm7 and its companion dominant chord (see progression 8) being used in between the IIIm7 (Em7) and IIm7 (Dm7) for a chromatic effect (chromatic means going in one direction and not skipping any notes. Example: A chromatic scale going up D D$^\#$ E F F$^\#$ etc.; a chromatic scale going down B^b A G$^\#$ G F$^\#$ etc.) or the ^{b}Vm7 of Am7, which normally would be in between the Em7 and Dm7.

c. Note the Dm7^{b}5s and remember they are also Fm6 and B^{b}9 – see synonyms.

Progression 10:

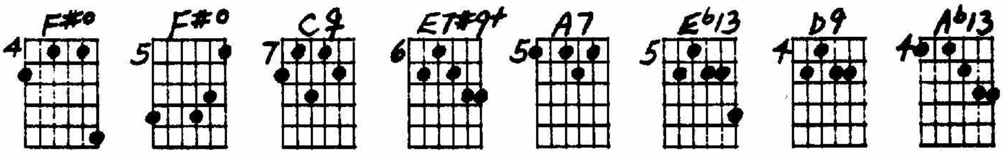
Measure No.'s	1	2	3	4	5
Basic Chords	C7	F7	Am A♭7	Gm C7	F7

Inversion Suggestions

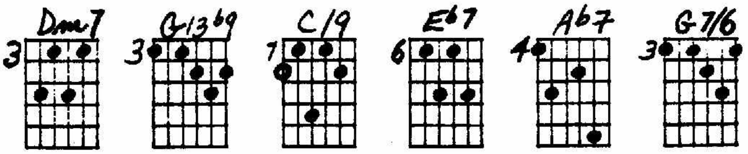


Measure No.'s	6	7	8	9
Basic Chords	C°	C E7	A7	D7

Inversion Suggestions



	10	11	12
	G7	C	G7



Points worth noting in this progression

A. Measure 2 - Using the ^{b}V of the D7(see page 59)

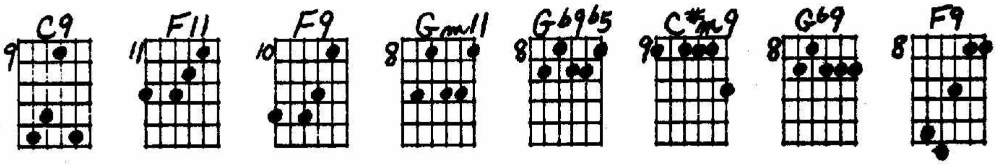
B. Measure 8 and 9 - the ^{b}Vs of the A7 and D7 are used for ½ measure each.

C. In measures 3 and 4 note the moving inner voice.

Progression 11

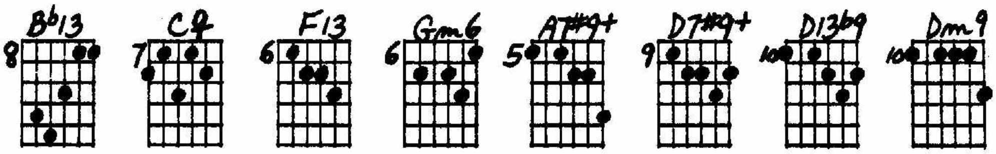
Measure No.	1	2	3	4	5
Basic Chord	C7	F7	C7	C7	F7

Inversion Suggestion



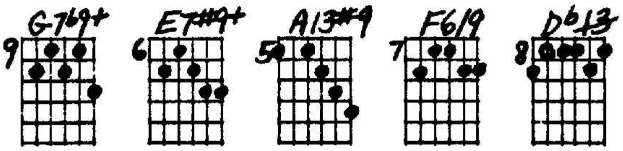
Measure No	6	7	8	9	10
Basic Chord	B^{b}7	C F7	Em7 A7	D7	G7

Inversion Suggestions


B♭13
8
C9
7
F13
6
Gm6
6
A7#9+
5
D7#9+
9
D13♭9
10
Dm9
10

Measure No	10	11	12
Basic Chord	G7	E7 A7	Dm7 G7

Inversion Suggestion


G7♭9+
9
E7#9+
6
A13#9
5
F6/9
7
D♭13
8

Points of interest:

a. Measure 4 – since you may substitute G^{b}7 (F$^{\#}$7) for C7 due to the ^{b}V principle, sometimes you may put its companion m7 before it where time and your ears permit. Remember that the companion chords are thought of as IIm7 and V7.

b. Measure 3 – these chords are not easy, but with practice . . .

c. Measure 6 – B^{b}13 is used without the Fm7 as in progression 8.

d. Measure 7 – I to IV7 is a common change in this measure, and major type and dominant type chords could be mixed on the I and/or IV (like I7, IV7 or I7, IV9 or I9, IV6, etc.).

e. Measure 8 – the reason Gm6 is substituted for Em7 is because Em7^{b}5 can be used for Em7 and Em7^{b}5 IS Gm6 (see Synonyms). Think about the implications here– like maybe Gm9 or Gm11 for Em7, etc.

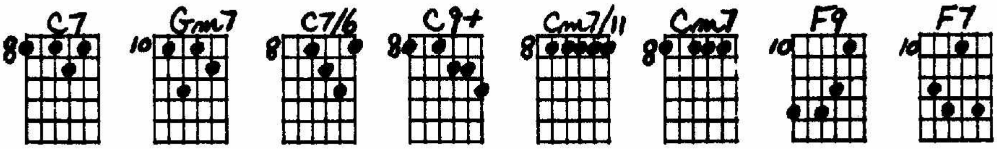
f. Measure 9 – notice the triads on the top 3 strings. These chords could be thought of as D7 chords with B^{b} and B triads superimposed on top; this type of chord is called a Polytonal or bi-tonal chord as you have encountered earlier in section 6.

g. Measure 12 – F6/9 for Dm7. Notice that F6/9 – Dm7/11.

Progression 12:

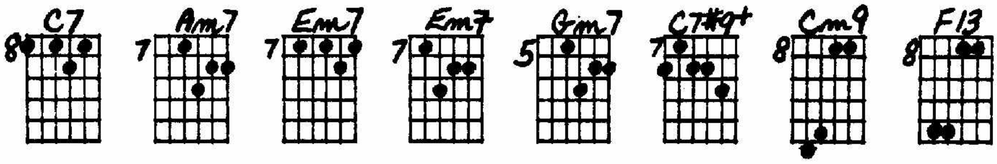
Measure No.'s	1	2
Basic Chords	C7	F7

Inversion Suggestions


C7
8
Gm7
10
C7/6
8
C9+
8
Cm7/11
8
Cm7
8
F9
10
F7
10

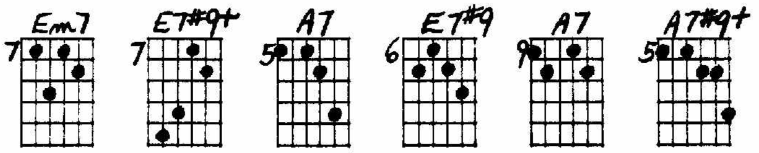
Measure No.'s	3	4	5	6
Basic Chords	C Em	C7	F7	F7

Inversion Suggestions


C7
8
Am7
7
Em7
7
Em7
7
Gm7
5
C7#9+
7
Cm9
8
F13
8

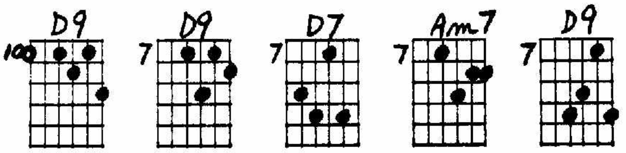
Measure No.'s	7	8
Basic Chords	Em7	A7

Inversion Suggestions

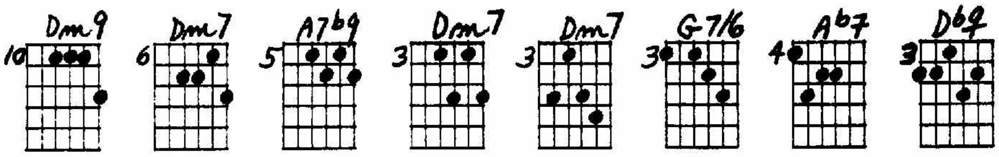


Measure No.'s	9
Basic Chords	D7

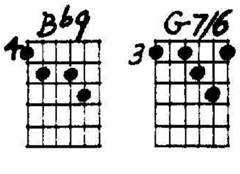
Inversion Suggestions



10	11
G7	C



12	
Dm7	G7



This progression is more of a "solo" progression due to the abundance of high voicings (that is, on the high strings instead of the lower strings). Many of these chords would be too shallow sounding for rhythm playing.

Points of interest:

a. There are 4 chords in some measures and even 5 and 6 chords in measures 9 and 10. You must feel how to put them in; there are no rules for it. However, don't try to play this progression at too fast a tempo or it will be extremely difficult to play as many as 6 chords in one measure; it will work nicely at a moderate tempo though.

b. Measure 3 – (Em7) the IIIm7 sometimes follows a I chord in this measure.

c. Measures 5 and 6 – closer voicings in these chords – closer to a "piano" sound.

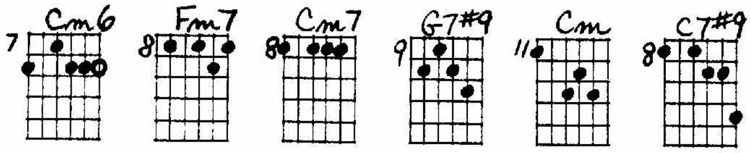
d. Measure 8 – the E7$^{\#9}$ is used as a temporary passing chord between the other A7 types. Using the V7 type of chord instead of the usual Vm7 is sometimes done.

e. Measure 10 – the A7^{b9} is used as a passing chord here in the same fashion as the E7$^{\#9}$ in measure 8. Again, it is the V7 of the chords it goes in between.

Progression 13 Minor Blues (Key of Cm)

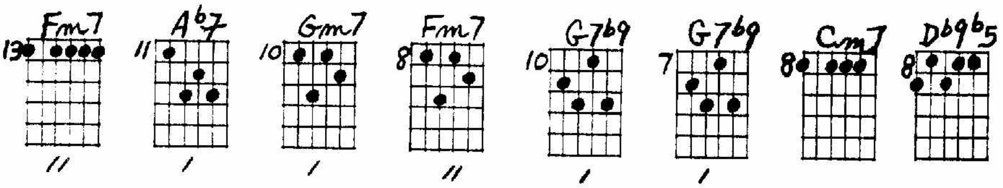
Measure No.'s	1	2	3	4
Basic Chords	Cm	Fm	Cm	Cm

Inversion Suggestions


Cm6
7
Fm7
8
Cm7
8
G7#9
9
Cm
11
C7#9
8

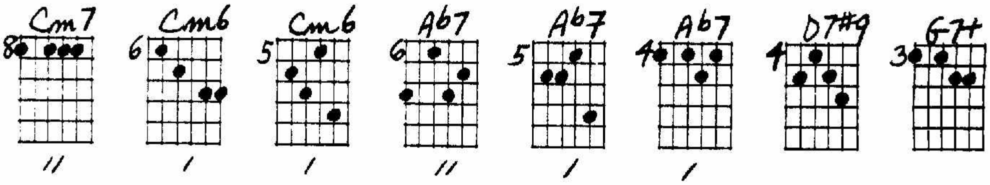
Measure No.'s	5	6	7
Basic Chords	Fm	Fm	Cm

Inversion Suggestions

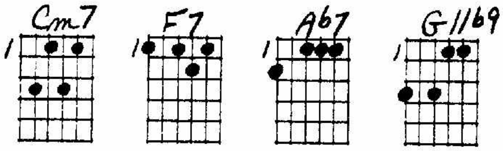

Fm7
13
//
Ab7
11
/
Gm7
10
/
Fm7
8
//
G7b9
10
/
G7b9
7
/
Cm7
8
Db9b5
8

Measure No.'s	8	9	10
Basic Chords	Cm	Ab	G7

Inversion Suggestions


Cm7
8
//
Cm6
6
/
Cm6
5
/
Ab7
6
//
Ab7
5
/
Ab7
4
/
D7#9
4
G7+
3

11	12
Cm	G7


Cm7
1
F7
1
Ab7
1
G11b9
1

Points of interest:

a. G7$^{\#}$9 in measure 2 – this is the V7 being used as a temporary passing chord, just as in the previous "major blues" progressions. All the blues progressions that you have encountered until now are often referred to as "major blues" to distinguish them from blues progressions that are based on minor chords.

b. A^{b}7, Gm7, Fm7 chords in measures 5 and 6 – this is the widely used concept of playing a fragment of the fundamental harmonies of a scale. When this is done, the starting chord is not that important, but the ending chord is very important. It must fit with the chord that the fragment is being substituted for; it also must lead nicely to the next chords to be used. In the above case, the A^{b}7 Gm7 Fm7 is a fragment of the dorian minor scale (see page 89), and since the Fm7 is the last chord of the fragment and the basic chord above it is Fm, there is no trouble here. One other word of caution – when using substitute chords from different minor scales, if you are playing by yourself, there are no other basic concerns than those just stated. However, if you are the rhythm player behind a soloist, and you start playing fragments from different scales, you will confuse him unless he has a tremendous ear. So when playing minor blues with others, it is a good idea to talk over what possible chords might be used.

c. $G7^{b9}$ in measure 6 – this is again a V7 passing chord, but the difference is that it is the V7 of the NEXT measure. So it is anticipating the next chord change. Again, this sounds fine when playing by yourself, but you must be careful about it when playing with others.

d. D^{b9b5} in measure 7 – this is again a V7 passing chord because $D^{b9b5} = G7^{\#5b5}$. You could also think of the D^{b9b5} as working here because of the ^{b}5th dominant substitution discussed earlier.

e. Measure 9 – using the ^{b}VI chord (A^{b} in this case) in measure 9 of a 12 bar minor blues is pretty common; also following this in measure 10 with the V7 is very common. Some other possibilities for measures 9 and 10 are: G7 F7, $A^{b}7$ F7 G7, $B^{b}7$ $A^{b}7$ G7, F7 D7 $A^{b}7$ G7, $B^{b}7$ $E^{b}7$ $A^{b}7$ G7 ,etc. Remember to try ^{b}5ths of all dominant chords – like $A^{b}7$, D7 G7 would become D7, $A^{b}7$ $D^{b}7$. You will notice, however, that the ^{b}5th of a IV7 does not work as well as others. In other words, for the above progression, the B7 would not work so well instead of F7. Experiment and see.

f. Also in measure 9, notice the $A^{b}7$ and A^{b7} are both substituted for A^{b} major. Either the major or dominant family of chords will sound good for the ^{b}VI chord.

g. $D7^{\#9}$ – this is the back-cycling principle (notice that II7 V7 is used here instead of IIm7 V7 which could have been used instead). However, usually in minor blues $IIm7^{b5}$ is used instead of IIm7. In other words, if you see G7 in a minor blues in Cm, if you did think of Dm7 G7 you would usually think $Dm7^{b5}$ instead.

h. Turnarounds in minor blues usually use similar chords to the ones listed for measures 9 and 10.

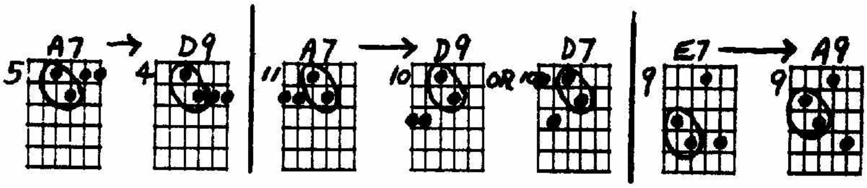
i. The last chord in measure 8 could be switched to an $E^{b}7$ type as this would lead the ear nicely to the A^{b} in the next measure. In other words, it would be the V7 passing chord anticipation bit again.

Section 19

Miscellaneous Concepts

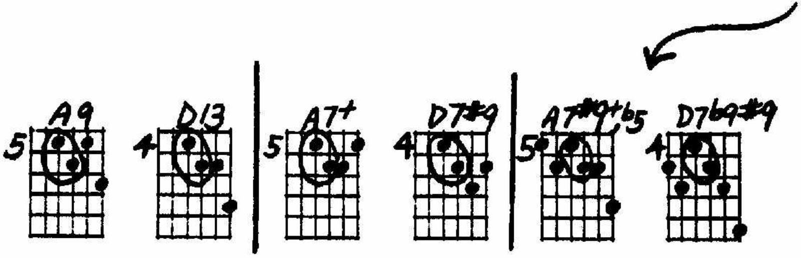
1) THE 3rd AND ^{b}7th – if you take any 7th chord and lower the 3rd and ^{b}7th 1 fret each, you will get a 9th chord built on the IV. Example: A7 (A C$^\#$E G) lower the 3rd (C$^\#$) and ^{b}7th (G). You now have A C E F$^\#$ which is a D9 chord (without the root). This can be a useful tool for locating I and IV chords that are related. Sometimes the chord arrived at is not a pleasing inversion, due to the 9th in the bass or other undesirable features (although even the 9th in the bass can sometimes be used in a pleasing manner). If you arrive at such a chord, just lower the 9th two frets to the root, and you will have a IV7 that should be agreeable.

Examples:



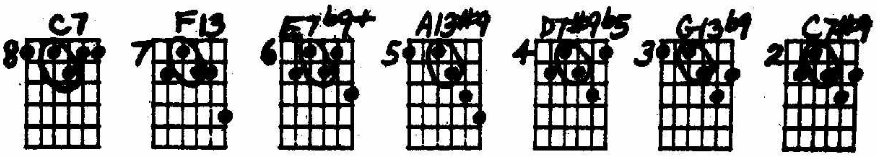
You actually can take the 3rd and ^{b}7th of ANY dominant chord, and by lowering them 1 fret each, you will get some form of a IV dominant chord, although some will not be playable and/or sound bad.

Examples:



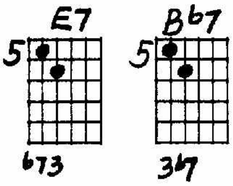
In any progression that has a series of dominant chords based on the cycle, you may progressively lower the 3rd and ^{b}7th, one fret at a time. Example: (Part of a blues progression in key of C)

Basic:	C7	F7	E7	A7	D7	G7	C7
	//	//	//	//	////	////	////
Measure No.	7		8		9	10	11

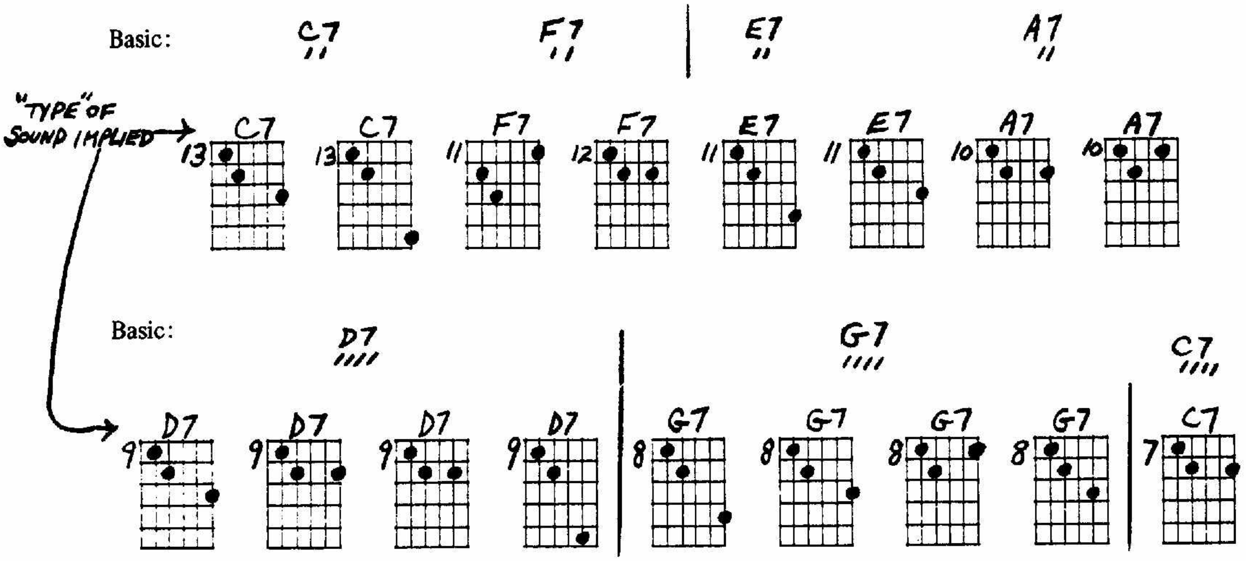


Armed with this new information, go back, and follow the flight of the 3rd and b7th in any series of dominant type chords in this book. You will also notice that the 3rd and b7th can be named in two keys, a b5th apart.

Example:


E7
5
b7 3
Bb7
5
3 b7

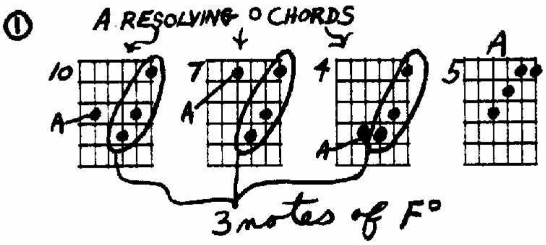
Also you may just use the 3rd and b7th of any dominant chord and play melodies on top for an interesting effect. Here is an example, again starting with the 7th measure in a blues progression in the key of C:


Basic:
C7 //
F7 //
E7 //
A7 //
"TYPE" OF SOUND IMPLIED
C7 13
C7 13
F7 11
F7 12
E7 11
E7 11
A7 10
A7 10
Basic:
D7 ////
G7 ////
C7 ////
D7 9
D7 9
D7 9
D7 9
G7 8
G7 8
G7 8
G7 8
C7 7

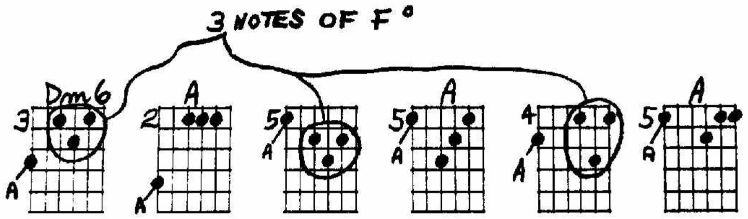
Notice that most of these diagrams ARE NOT really chords, but fragments. If you want a fuller sound, you might try filling in more notes.

2) For an interesting sounding resolution of V7 to I, you may try putting together any 3 notes of a diminished 7th chord whose root is one fret higher than the root of the V7 chord, with the root of the I chord. This chord will now replace the V7 chord, and will be called a RESOLVING DIMINISHED CHORD.

Key of A – for E7 to A you could use something like these examples:

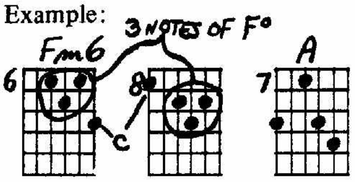

①
A RESOLVING ° CHORDS
10
A
7
A
4
A
A
5
3 notes of F°

②



As usual, some of the inversions sound better than others. The root of the I chord is usually, but not always, put in the bass. Notice the voice leading in the examples given. Also notice the similarity between the resolving diminished chord and the 11^{b}9, 7/11, 9+; also notice that an A resolving diminished chord CAN equal a Dm6 (even though Dm6 is also Bm7^{b}5 and E9 (no roots), don't use this particular thinking now, as just thinking in terms of Dm6 will be good enough). You may also use the resolving diminished chords for V7 to Im. Try playing the examples with Ims instead of majors (just flat the 3rds (C$^{\#}$s) in the A chords). For V7 to I or V7 to Im, you may also use the 3 notes of the diminished chord that is one fret higher than the V7 with the ^{b}3RD of the Im chord.

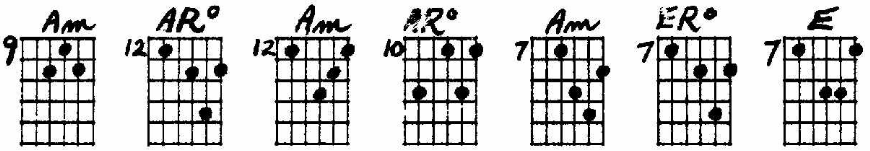
Example:



Notice that these new resolving ° chords can be thought of as 3 frets higher than the resolving diminished chords with the root of the I. Also notice now that this new E resolving ° chord can equal Fm6 where the other was Dm6.

These resolving chords are also effective when used in chord progressions – try the following:

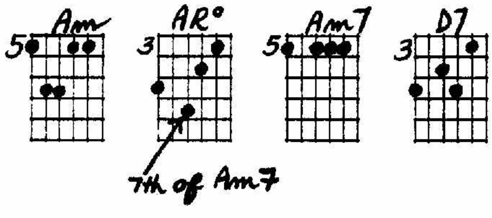
Basic: Am E



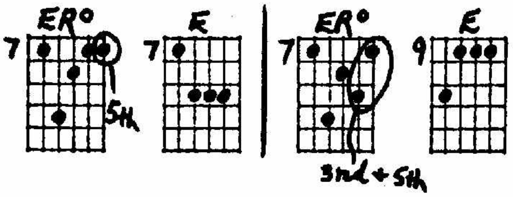
Notice that the chord before the E chord acts as a V7 leading into the E. Resolving diminished chords also work well in place of m7 type of chords, as long as the 7th tone of the m7 is in the resolving dim. chord.

Example: Basic: Am Am7 Am7 Am6 etc.

Notice the voice leading.



Sometimes other chord notes are added to resolving diminished chords. Examples:



Notice that these ER° are similar to E7+, E9+.

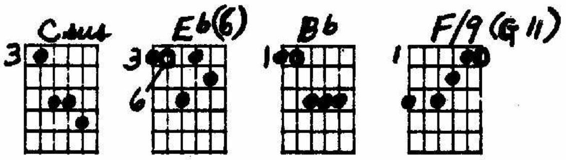
Another useful substitution: Use VR° for I° (also, some III R°'s for I°). Also note the similarity between IR° and IIm7^{b}5 (IVm6).

Section 20

Rock Type Progressions

Below are listed some common chord progressions that might be used for a rock type song, and ways to add some flavor to them using substitutions.

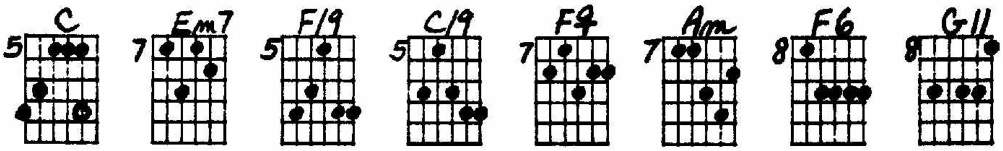
1 Basic: C   E♭   B♭   F



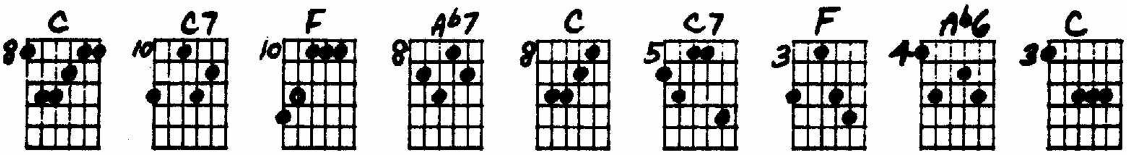
Notice the bass line in progression 1. Also notice how the F add 9 with the unusual feature of the 9th in the bass works well here for an F chord. Be careful if you use something like this with a bass player, because, for instance, if he were playing the F in the bass, your G note would clash.

Notice that the G11 in progression 2 is also an F add 9 – Compare.

2 Basic: C // Em // | F // C // | F // Am // | Dm // G7 //



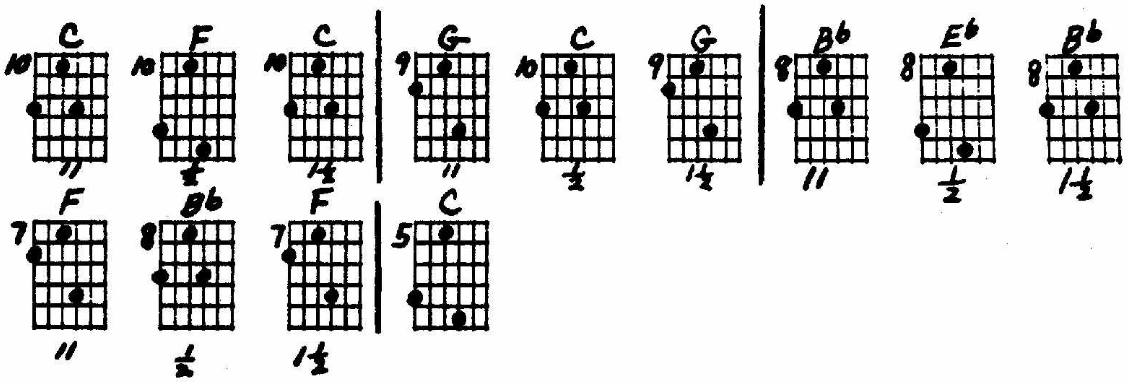
3 Basic: C //// | F // A♭ // | C // C7 // | F // Fm // | C



Notice the substitution of an A^{b}7 for an A^b. Normally when you see an A^b chord you would think of A^b major type substitutes, like A^{b}7, A^{b}6, A^b add 9, etc. But for a rock sound, quite often for a major chord you can substitute the dominant 7th and its extensions, like the 9th, 13th, etc. Experiment. Also notice the A^{b}6 for Fm – referring to the synonyms, you will see that A^{b}6 = Fm7;

therefore, you could say you are substituting Fm7 for Fm. Since A^{b7} = Fm9 you could try an A^{b7} for Fm; since A^{b9} = Fm11 you could also try it for Fm, and so on.

4 Basic: C //// | G //// | B♭ //// | F //// | C



Notice the VOICING and VOICE LEADING in these chords. They are all open triads as used in section 15. Also notice that in each measure the IV chord of each basic chord is sandwiched between two I chords. This technique can usually be used in rock sounds. This could be carried one step further if time permits; that is, you may put in the IV of the IV before the IV. If you are confused, here is an example:

Basic C ////
Substitute C B^{b} F C
/ / / /

The B^{b} is the IV of F which is the IV of C.

When you do this, you are actually using the cycle in a clockwise motion. When time permits you could carry this whole thing even further, like, for example, playing C A^{b} E^{b} B^{b} F C all for a basic C chord. As with other chord substitutions, you must determine the type of sound this produces, and decide when something like this would be appropriate.